

**Four essays on crowd investor and stakeholder reactions to failure signals across social,  
environmental, and commercial ventures**

Inaugural-Dissertation

to obtain the degree of Doktor der Wirtschaftswissenschaften  
submitted to the Faculty of Business Administration and Economics  
at the Heinrich Heine University Düsseldorf

Presented by

**Caroline Lindlar, M.Sc.**

1<sup>st</sup> supervisor: Univ-Prof. Dr. Marius Claus Wehner, Chair of Business Administration,  
especially

Digital Management & Digital Work

2<sup>nd</sup> supervisor: Jun-Prof. Dr. Eva Alexandra Jakob, University Bayreuth, Chair of Social  
Entrepreneurship

Date: 10.02.2026

## **Acknowledgments**

First, I would like to express my heartfelt gratitude to the Manchot Graduate School “Competitiveness of Young Enterprises” for awarding me a full scholarship. This generous support allowed me to devote myself entirely to my research and made completing this dissertation possible. This journey, mirroring the theme of failure explored in my work, was filled with moments of uncertainty, perseverance, and personal growth.

I am deeply grateful to my supervisors, Professor Marius Claus Wehner and Professor Eva Alexandra Jakob, for their guidance, insightful feedback, and ongoing encouragement. Their expertise and mentorship have been essential in shaping both the direction and the quality of this dissertation.

My heartfelt appreciation also goes to my family and friends for their enduring support and belief in me throughout this demanding process. Their understanding and encouragement sustained me through the many highs and lows of this journey.

A special word of gratitude goes to Alexander, my fiancé, whose unwavering support and particular emotional strength carried me through the most challenging phases of this journey. His belief in me and constant empowerment made this achievement possible.

**Table of contents**

|                                                                                                                                     |             |
|-------------------------------------------------------------------------------------------------------------------------------------|-------------|
| <b>Table of contents.....</b>                                                                                                       | <b>I</b>    |
| <b>List of tables .....</b>                                                                                                         | <b>VI</b>   |
| <b>List of figures .....</b>                                                                                                        | <b>VII</b>  |
| <b>List of abbreviations.....</b>                                                                                                   | <b>VIII</b> |
| <b>1. Introduction .....</b>                                                                                                        | <b>1</b>    |
| 1.1 Relevance and overview of the dissertation .....                                                                                | 1           |
| 1.2 Research objectives of the four essays .....                                                                                    | 9           |
| <b>2. Failure signals in sustainable crowdfunding: Distinct reactions driven by crowd<br/>investors' experience (Essay I) .....</b> | <b>19</b>   |
| Abstract .....                                                                                                                      | 19          |
| Plain English summary.....                                                                                                          | 20          |
| 2.1 Introduction .....                                                                                                              | 21          |
| 2.2 Theoretical background and hypotheses .....                                                                                     | 25          |
| 2.2.1 Crowdlending and investors' experience .....                                                                                  | 25          |
| 2.2.2 Signaling theory .....                                                                                                        | 26          |
| 2.2.3 Failure signals and crowdfunding experience .....                                                                             | 27          |
| 2.2.4 Failure signals, sustainable campaigns, and crowdfunding experience .....                                                     | 30          |
| 2.3 Overview of studies.....                                                                                                        | 32          |
| 2.3.1 Overview study design: Study 1 and Study 2 .....                                                                              | 33          |
| 2.3.2 Differences between Study 1 and Study 2 .....                                                                                 | 34          |
| 2.4 Study 1.....                                                                                                                    | 35          |
| 2.4.1 Sample.....                                                                                                                   | 35          |
| 2.4.2 Research design.....                                                                                                          | 36          |
| 2.4.3 Measures.....                                                                                                                 | 39          |
| 2.4.4 Implementation and manipulation checks.....                                                                                   | 40          |
| 2.4.5 Analytical procedure .....                                                                                                    | 41          |
| 2.4.6 Results .....                                                                                                                 | 41          |
| 2.4.7 Conclusion Study 1 .....                                                                                                      | 43          |
| 2.5 Study 2.....                                                                                                                    | 46          |
| 2.5.1 Sample.....                                                                                                                   | 46          |
| 2.5.2 Research design.....                                                                                                          | 46          |
| 2.5.3 Measures.....                                                                                                                 | 49          |

|                                                                                                |           |
|------------------------------------------------------------------------------------------------|-----------|
| 2.5.4 Results .....                                                                            | 50        |
| 2.5.5 Conclusion Study 2 .....                                                                 | 52        |
| 2.6 Post hoc survey.....                                                                       | 55        |
| 2.6.1 Sample.....                                                                              | 55        |
| 2.6.2 Measures.....                                                                            | 55        |
| 2.6.3 Results .....                                                                            | 56        |
| 2.7 Overall discussion .....                                                                   | 56        |
| 2.7.1 Theoretical implications .....                                                           | 57        |
| 2.7.2 Practical implications .....                                                             | 61        |
| 2.7.3 Limitations and future research implications .....                                       | 62        |
| 2.8 Conclusion.....                                                                            | 65        |
| <b>3. The hidden disadvantages of failure for female entrepreneurs in crowdlending:</b>        |           |
| <b>Evidence from randomized experiments (Essay II) .....</b>                                   | <b>66</b> |
| Abstract .....                                                                                 | 66        |
| 3.1 Introduction .....                                                                         | 67        |
| 3.2 Theoretical background and hypotheses .....                                                | 70        |
| 3.2.1 Stereotype activation and application framework.....                                     | 70        |
| 3.2.2 Gender stereotypes in crowdlending .....                                                 | 72        |
| 3.3 Gender stereotypes and failure in crowdlending.....                                        | 73        |
| 3.4 The role of social venture framing .....                                                   | 75        |
| 3.5 Methods and results.....                                                                   | 77        |
| 3.5.1 Methods Study 1: Audio vignette study—prior investment failure perspective .....         | 77        |
| 3.5.1.1 Experimental design.....                                                               | 78        |
| 3.5.1.2 Pre-study.....                                                                         | 79        |
| 3.5.1.3 Sample.....                                                                            | 79        |
| 3.5.1.4 Study variables .....                                                                  | 80        |
| 3.5.1.5 Validity and quality checks .....                                                      | 81        |
| 3.5.2 Results: Study 1 .....                                                                   | 82        |
| 3.5.3 Methods Study 2: Metric conjoint analysis—prior entrepreneurial failure perspective..... | 85        |
| 3.5.3.1 Experimental design.....                                                               | 85        |
| 3.5.3.2 Pre-study.....                                                                         | 85        |
| 3.5.3.3 Sample.....                                                                            | 86        |

|                                                                                                                              |            |
|------------------------------------------------------------------------------------------------------------------------------|------------|
| 3.5.3.4 Study variables .....                                                                                                | 86         |
| 3.5.4 Results: Study 2.....                                                                                                  | 87         |
| 3.5.5 Robustness Study 2 .....                                                                                               | 90         |
| 3.6 Discussion .....                                                                                                         | 93         |
| 3.6.1 A dynamic perspective on gender biases .....                                                                           | 93         |
| 3.6.2 A more nuanced understanding of distinct failure types .....                                                           | 94         |
| 3.6.3 Highlighting funding challenges of social ventures .....                                                               | 97         |
| 3.7 Practical implications .....                                                                                             | 98         |
| 3.8 Limitations and future research.....                                                                                     | 99         |
| 3.9 Conclusion.....                                                                                                          | 101        |
| <b>4. A metric-conjoint experiment on crowd lenders' responses to failure attributions of entrepreneurs (Essay III).....</b> | <b>102</b> |
| 4.1 Introduction .....                                                                                                       | 103        |
| 4.2 Theoretical background and hypotheses development.....                                                                   | 107        |
| 4.2.1 Attribution theory .....                                                                                               | 107        |
| 4.2.2 Failure in crowdlending .....                                                                                          | 108        |
| 4.2.3 Formulation of hypotheses .....                                                                                        | 109        |
| 4.2.3.1 Locus of causality and investment willingness among crowd lenders.....                                               | 109        |
| 4.2.3.2 Controllability and investment willingness among crowd lenders .....                                                 | 112        |
| 4.2.3.3 Stability and investment willingness among crowd lenders .....                                                       | 113        |
| 4.2.3.4 The moderating role of stability .....                                                                               | 114        |
| 4.2.3.5 The moderating role of crowd lender's gender .....                                                                   | 115        |
| 4.2.3.5.1 Crowd lenders, gender and causality .....                                                                          | 115        |
| 4.2.3.5.2 Crowd lenders, gender and controllability .....                                                                    | 117        |
| 4.2.3.5.3 Crowd lenders, gender and stability .....                                                                          | 118        |
| 4.3 Method .....                                                                                                             | 120        |
| 4.3.1 Research design.....                                                                                                   | 120        |
| 4.3.2 Implementation and manipulation checks.....                                                                            | 123        |
| 4.3.3 Sample.....                                                                                                            | 124        |
| 4.3.4 Measures.....                                                                                                          | 125        |
| 4.3.5 Analytical approach.....                                                                                               | 127        |
| 4.4 Results .....                                                                                                            | 128        |
| 4.4.1 Primary results.....                                                                                                   | 128        |

|                                                                                                                       |            |
|-----------------------------------------------------------------------------------------------------------------------|------------|
| 4.4.2 Additional results .....                                                                                        | 134        |
| 4.5 Discussion .....                                                                                                  | 135        |
| 4.5.1 Third-party reactions to failure attributions .....                                                             | 135        |
| 4.5.2 Gendered reactions to failure attributions .....                                                                | 137        |
| 4.5.3 Theoretical implications .....                                                                                  | 139        |
| 4.5.4 Practical implications .....                                                                                    | 140        |
| 4.5.5 Limitations and future research .....                                                                           | 142        |
| 4.6 Conclusion .....                                                                                                  | 144        |
| <b>5. Understanding failure in social entrepreneurship – A critical analysis and research agenda (Essay IV) .....</b> | <b>146</b> |
| 5.1 Introduction .....                                                                                                | 147        |
| 5.2 Contextualizing failure for social entrepreneurship .....                                                         | 150        |
| 5.3 Methodological approach .....                                                                                     | 152        |
| 5.3.1 Article search and selection .....                                                                              | 152        |
| 5.3.2 Analysis .....                                                                                                  | 153        |
| 5.4 Failure in social entrepreneurship: What we know and how we are limited .....                                     | 154        |
| 5.5 Understanding failure .....                                                                                       | 156        |
| 5.6 Pre-failure .....                                                                                                 | 160        |
| 5.6.1 Institutional level .....                                                                                       | 160        |
| 5.6.2 Firm level .....                                                                                                | 160        |
| 5.6.3 Individual level .....                                                                                          | 162        |
| 5.7 Post-failure .....                                                                                                | 165        |
| 5.8 A Framework for identifying and organizing research opportunities .....                                           | 169        |
| 5.8.1 Conceptualizing failure in social entrepreneurship .....                                                        | 171        |
| 5.8.2 Specifying emotional and identity-based vulnerabilities in the pre-failure phase .....                          | 172        |
| 5.8.3 Accounting for divergent perceptions of failure across stakeholder groups .....                                 | 174        |
| 5.8.4 Understanding the consequences of failure for beneficiaries and communities ...                                 | 176        |
| 5.8.5 Freeing from taboos at all levels .....                                                                         | 177        |
| 5.9 Conclusion .....                                                                                                  | 179        |
| <b>6. Conclusion .....</b>                                                                                            | <b>181</b> |
| 6.1 Summary of findings .....                                                                                         | 181        |
| 6.2 Theoretical implications .....                                                                                    | 184        |
| 6.3 Practical implications .....                                                                                      | 187        |

|                                                                                                       |            |
|-------------------------------------------------------------------------------------------------------|------------|
| <b>References .....</b>                                                                               | <b>191</b> |
| <b>Appendix .....</b>                                                                                 | <b>231</b> |
| Appendix A1 (Essay I) – Hypothetical scenario initial investment .....                                | 231        |
| Appendix A2 (Essay I) – Vignette social campaign .....                                                | 231        |
| Appendix A3 (Essay I) – Vignette environmental campaign .....                                         | 232        |
| Appendix A4 (Essay I) – Vignette commercial campaign.....                                             | 232        |
| Appendix A5 (Essay I) – Hypothetical scenario failure signal .....                                    | 233        |
| Appendix A6 (Essay I) – Randomization check (Study 1) .....                                           | 234        |
| Appendix A7 (Essay I) – Vignette social campaign (Study 2) .....                                      | 235        |
| Appendix A8 (Essay I) – Vignette environmental campaign (Study 2) .....                               | 236        |
| Appendix A9 (Essay I) – Vignette commercial campaign (Study 2).....                                   | 237        |
| Appendix A10 (Essay I) – Randomization check (Study 2) .....                                          | 238        |
| Appendix A11 (Essay I) – Study variables (Studies 1 and 2).....                                       | 239        |
| Appendix B1 (Essay II) – Scripted audio pitch social venture framing (Study 1).....                   | 240        |
| Appendix B2 (Essay II) – Scripted audio pitch commercial venture framing (Study 1)...                 | 240        |
| Appendix B3 (Essay II) – Failure E-mail (Study 1).....                                                | 241        |
| Appendix B4 (Essay II) – Control variables (Study 1) .....                                            | 242        |
| Appendix B5 (Essay II) – Balance check sample (Study 1) .....                                         | 243        |
| Appendix B6 (Essay II) – Instruction and practice example conjoint study (Study 2).....               | 244        |
| Appendix B7 (Essay II) – Robustness check: instruction and practice example conjoint<br>study .....   | 246        |
| Appendix B8 (Essay II) – Robustness check - Description of attributes .....                           | 248        |
| Appendix C1 (Essay III) – Exemplary investment profile of the metric conjoint experiment<br>.....     | 249        |
| Appendix C2 (Essay III) – Overview of study variables .....                                           | 250        |
| Appendix C3 (Essay III) – Multilevel model: Sustainable mission.....                                  | 251        |
| Appendix D1 (Essay IV) – Search term development, database, inclusion, and exclusion<br>criteria..... | 252        |
| Appendix D2 (Essay IV) – Prisma flow chart screening process .....                                    | 253        |
| Appendix D3 (Essay IV) – Included articles in the review.....                                         | 254        |

**List of tables**

|                                                                                                     |     |
|-----------------------------------------------------------------------------------------------------|-----|
| Table 1-1: Characteristics of the four essays .....                                                 | 7   |
| Table 2-1: Overview distinctions studies 1 and 2 .....                                              | 35  |
| Table 2-2: Sample characteristics for all studies.....                                              | 38  |
| Table 2-3: Means, standard deviations, and correlations (Study 1) .....                             | 42  |
| Table 2-4: Regression coefficients, standard errors, and model summary after failure (Study 1)..... | 44  |
| Table 2-5: Means, standard deviations, and correlations (Study 2) .....                             | 51  |
| Table 2-6: Regression coefficients, standard errors, and model summary after failure (Study 2)..... | 53  |
| Table 3-1: Means, standard deviations, and correlations (Study 1) .....                             | 83  |
| Table 3-2: Regression coefficients, standard errors, and model summary (Study 1) .....              | 84  |
| Table 3-3: Description of attributes (Study 2) .....                                                | 87  |
| Table 3-4: Means, standard deviations, and correlations .....                                       | 88  |
| Table 3-5: Regression coefficients, standard errors, and model summary (Study 2) .....              | 89  |
| Table 3-6: Robustness check: Results of the multilevel analysis (Study 2).....                      | 92  |
| Table 4-1: Conjoint attributes (Level 1).....                                                       | 123 |
| Table 4-2: Descriptive statistics, correlations, reliabilities, and VIFs (Level 2).....             | 128 |
| Table 4-3: Multilevel model.....                                                                    | 130 |
| Table 4-4: Overview of hypotheses .....                                                             | 134 |
| Table 5-1: Review of failure understandings in the current literature .....                         | 158 |
| Table 5-2: Future research questions .....                                                          | 170 |



**List of figures**

|                                                                                                                     |     |
|---------------------------------------------------------------------------------------------------------------------|-----|
| Figure 1-1: Overview of four essays .....                                                                           | 18  |
| Figure 2-1: Mean of investment before and after failure signals depending on crowdfunding experience (Study 1)..... | 45  |
| Figure 2-2: Mean of investment before and after failure signals depending on crowdfunding experience (Study 2)..... | 54  |
| Figure 3-1: Conceptual model (Essay II) .....                                                                       | 77  |
| Figure 4-1: Conceptual model (Essay III).....                                                                       | 120 |
| Figure 4-2: Moderation – controllability $\times$ stability.....                                                    | 132 |
| Figure 4-3: Moderation – locus of causality $\times$ stability .....                                                | 132 |
| Figure 4-4: Moderation – locus of causality $\times$ female crowd lender .....                                      | 133 |
| Figure 4-5: Moderation – controllability $\times$ female crowd lender.....                                          | 133 |
| Figure 5-1: Current and future research framework.....                                                              | 155 |

**List of abbreviations**

|            |                                                                    |
|------------|--------------------------------------------------------------------|
| ANOVA      | Analysis of variance                                               |
| AOM        | Academy of Management                                              |
| b          | Unstandardized regression coefficient                              |
| $\beta$    | Standardized regression coefficient                                |
| CI         | Confidence interval                                                |
| Coef.      | Regression coefficients of predictors                              |
| e.g.       | Exempli gratia (English: for example)                              |
| EURAM      | European Academy of Management                                     |
| df         | Degrees of freedom                                                 |
| F          | F-test                                                             |
| ICC        | Intraclass correlation coefficient                                 |
| i.e.       | Id est (English: that is)                                          |
| M          | Mean                                                               |
| $M_{diff}$ | Mean difference                                                    |
| M.Sc.      | Master of Science                                                  |
| n          | Sample size                                                        |
| OLS        | Ordinary least squares regression                                  |
| p          | Probability level                                                  |
| PRISMA     | Preferred reporting items for systematic reviews and meta-analyses |
| RIFS       | Random intercept fixed slope                                       |
| SD         | Standard deviation                                                 |
| SE         | Standard error                                                     |
| SE         | Self-enhancement                                                   |
| ST         | Self-transcendence                                                 |
| t          | t-test                                                             |
| t1         | Measurement time 1                                                 |
| t2         | Measurement time 2                                                 |
| vs.        | Versus                                                             |
| VIF        | Variance inflation factor                                          |
| $\times$   | Interaction term                                                   |
| $\chi^2$   | Chi-squared test                                                   |

## 1. Introduction

### 1.1 Relevance and overview of the dissertation

Social and sustainable ventures, hereafter referred to as *impact ventures* (e.g., Johnsen & Lenhard, 2025), are defined as ventures that identify, evaluate, and exploit opportunities to create social and/or environmental value through commercial market-based activities (Bacq & Janssen, 2011). These ventures pursue mixed objectives, integrating social and environmental missions alongside financial returns. They often face persistent challenges in securing financial resources (Shepherd & Patzelt, 2011) because traditional investors, such as banks or venture capital firms, typically prioritize financial returns and undervalue the non-financial objectives of such ventures (Messeni Petruzzelli et al., 2019).

Against this background, crowdfunding has emerged as a crucial financing option for impact ventures (Anglin et al., 2022). It enables ventures to raise capital from a large and diverse group of individuals through online platforms (Escudero et al., 2025), offering an alternative to traditional financial institutions (Penz et al., 2022; Slimane & Rousseau, 2020). Crowdfunding encompasses multiple models, each offering unique forms of engagement and value propositions. Previous literature mainly focused on crowdfunding models that do not offer financial returns, such as donation-based crowdfunding (e.g., Ba et al., 2020; Behl et al., 2023; Gleasure & Feller, 2016), prosocial lending-based crowdfunding (e.g., Anglin et al., 2023; Moss et al., 2018), and reward-based crowdfunding (e.g., Anglin et al., 2025; McSweeney et al., 2025).

In contrast, crowdfunding models that involve financial returns, such as lending- or debt-based crowdfunding (also known as *crowdlending*), remain underexplored in the context of impact ventures (Böckel et al., 2020; Dinh, Isaak, & Wehner, 2024). This is surprising, since crowdlending has emerged as a particularly prominent and relevant crowdfunding model (Shneor et al., 2024), accounting for over 60% of the global crowdfunding market in

2024 (GrandViewResearch, 2026). In crowdlending, entrepreneurs launch campaigns to raise funds from private investors (also referred to as *crowd lenders* or *crowd investors*) through loans that are repaid with interest over a fixed period (Escudero et al., 2025). The crowdlending model is particularly significant for impact ventures, as it attracts investors motivated by both financial and prosocial objectives (Dinh, Isaak, & Yahyaoui, 2024). Crowdlending thereby represents a hybrid financing context in which both financial performance and social or environmental value creation are salient evaluative criteria.

While crowdlending has opened new financing pathways for impact ventures, it is equally shaped by the possibility of *failure* (e.g., Vanacker et al., 2019). Approximately one-third of ventures in crowdlending fail to deliver on their promises (Civardi et al., 2023; Iyer et al., 2015), leaving entrepreneurs with a history of failure and crowd investors with investment losses. Hence, failure in crowdlending is not merely a potential outcome for entrepreneurs; it also serves as a critical *signal* to *external stakeholders*. Scholarly attention has focused on the entrepreneur's perspective, examining individuals' psychological responses and learning processes following failure (Anglin et al., 2025; Berchicci & Boons, 2025; Piening et al., 2021); however, knowledge is still limited about how external stakeholders interpret and react to failure. Crowd investors represent a pivotal stakeholder group because they often engage in serial investing (Andersen et al., 2019). Their continued engagement on crowdlending platforms is critical to the long-term viability of impact ventures. Moreover, in the context of impact ventures, failure entails not only financial losses but also unmet social and environmental objectives. Unlike failures in commercial ventures, which typically entail only financial losses, failures in impact ventures impose a compounded loss on crowd investors by undermining financial returns as well as social and environmental objectives (Hornuf et al., 2021). Despite these implications, scholarship has yet to explore the mechanisms that drive such reactions and the conditions under which they vary.

Extant research on the pre-funding phase of crowdlending highlights substantial heterogeneity among crowd investors (Cummings et al., 2020; Mochkabadi & Volkmann, 2020), indicating the variety of reactions to failure. This variety arises from key investor characteristics, including prior crowdfunding experience (e.g., Bapna & Ganco, 2021; Battisti et al., 2024), personal values (Dinh & Wehner, 2022; Nielsen & Binder, 2021), and demographic attributes (e.g., Mohammadi & Shafi, 2018; Tenner & Hörisch, 2021), which, in turn, influence how entrepreneurs characteristics such as gender (Anglin et al., 2022; Johnson et al., 2018) and attributions about the entrepreneur's learning from prior experiences (Zunino et al., 2022) are interpreted. For instance, differences in investors' experience influence how crowd investors interpret campaign signals, resulting in divergent evaluative responses among female and male entrepreneurs (Bapna & Ganco, 2021). Moreover, crowd investors also have distinct value orientations that shape their investment decisions. In particular, elevated biospheric values have been linked to preferences for impact ventures (e.g., Nielsen & Binder, 2021).

Collectively, these factors influence how crowd investors interpret and react to the inherent uncertainty of crowdfunding campaigns. Nevertheless, the role of these factors in shaping reactions to failure remains insufficiently understood. This dissertation seeks to address this gap by investigating how and why reactions to failure vary, answering the overarching research question: ***How do stakeholders, particularly crowd investors, react to the failure of impact versus commercial ventures, and what factors influence these reactions?***

This dissertation offers a comprehensive, multidimensional investigation of failure in the context of crowdlending and impact entrepreneurship. By integrating perspectives from signaling theory (Spence, 1973), stereotype activation (Kunda & Sinclair, 1999), and attribution theory (Weiner, 1985), this dissertation yields three central findings: (1) crowd

investor reactions to failure are heterogeneous, influenced by their crowdfunding experience, personal values, stereotypes, gender, and failure type; (2) crowd investors' reactions vary based on entrepreneurs' characteristics, such as gender and attribution strategies in the context of failure; and (3) failure is multidimensional and interpreted differently across stakeholder groups.

The results revealed in this dissertation advance theoretical understanding at the intersection of failure and crowdfunding, an area that remains underexplored in entrepreneurship research (Anglin et al., 2025; McSweeney et al., 2025; Zunino et al., 2022), by providing insights into how failure is perceived and managed among crowd investors (**Essays I to III**). Moreover, the findings extend the academic discourse on impact venture finance (Schätzlein et al., 2023) by highlighting how failure signals influence investment behavior in impact versus commercial ventures. Finally, this work contributes to the growing conversation on failure in impact entrepreneurship (e.g., Bacq et al., 2025; Czakon et al., 2024) by foregrounding external stakeholder reactions (**Essay IV**), a dimension that has received limited attention despite its critical implications. By moving from a narrow focus on crowd investors to a broader stakeholder perspective, this dissertation opens avenues for future research into how stakeholders perceive and react to failure in ventures where financial returns are intertwined with social and environmental missions.

Beyond its theoretical contributions, this dissertation also contributes to the broader societal and political conversations about how to enable more sustainable and inclusive futures. On the one hand, it addresses the growing urgency of the climate crisis, with global efforts falling short of the 1.5-degree target (Joint Research Center, 2025). In this context, entrepreneurship represents a critical mechanism for addressing environmental degradation and social inequality, alongside its role in fostering economic growth. Yet, the ventures seeking to drive such change often face structural barriers, particularly when they fail to meet

financial benchmarks. Accordingly, this dissertation highlights that failure in such ventures constitutes more than a financial event, it represents a potential disruption of long-term planetary well-being. This dissertation underscores the importance of viewing failure as a moment of adaptation, rather than an endpoint. Especially in light of the climate emergency, there is a pressing need to cultivate conditions in which impact ventures are to persist despite the risk of failure, and to support them in ways that sustain their mission.

On the other hand, this dissertation reflects shifting patterns in how financial systems are accessed and allocated. By focusing on crowdlending, it illustrates how financing is increasingly shaped by digital technologies that enable broader societal participation (e.g., Escudero et al., 2025; Kim & Hann, 2019). Unlike traditional finance, which is governed by institutional actors, such as banks or venture capital firms, crowdlending decentralizes financial decision-making and offers more inclusive avenues for capital allocation. This democratization of finance allows a broader range of individuals to support ventures that align with their values (e.g., Dinh, Isaak, & Wehner, 2024; Penz et al., 2022). Crowdlending, therefore, expands both access to capital and the range of actors who influence which ventures are considered worthy of support. These developments point to a reconfiguration of financial structures, away from concentrated institutional control and toward more participatory and value-driven investment processes. By considering how crowdfunding has changed the landscape of financial systems, this dissertation aims to demonstrate the diverse ways in which stakeholders interpret and react to failure, thereby offering new insights into the heterogeneity of crowd investor behavior.

Based on four distinct essays, this dissertation investigates the overarching research question, with each essay addressing specific sub-questions. **Table 1-1** summarizes these essays and outlines their theoretical perspectives, methodologies, objectives, and contributions. The structure of this dissertation is as follows: **Chapter 1** provides detailed

descriptions of the sub-questions and describes how the four essays are thematically and contextually linked. Additionally, it highlights the dissertation's overall contributions.

**Chapters 2 to 5** present the four essays that comprise this dissertation. **Chapter 6** concludes the dissertation by discussing the theoretical and practical insights gained from the essays, their implications, and directions for future research.



Table 1-1: Characteristics of the four essays

| Essay | Title                                                                                                       | Theoretical perspective(s)                      | Research objectives                                                                                                                                                                                                                                         | Method and sample                                                                                                                                                                                                       | Results and contributions                                                                                                                                                                                                                                                                                                                                                                                                     | Current status                                                        | Conferences                                                                                                                                                                                                                                                                                                                                                                                                         | Share of contributions                                  |
|-------|-------------------------------------------------------------------------------------------------------------|-------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------|
| I     | Failure signals in sustainable crowdfunding: distinct reactions driven by crowd investors' experience       | Signaling theory                                | This study examines characteristics that influence reactions to failure and investigates how prior crowdfunding experience shapes crowd lenders' responses to investment failure.                                                                           | The method comprises quantitative vignette studies with sample sizes of 153 and 308, and a survey with a sample of 204 individuals with crowdfunding and investment experience.                                         | This study finds that experienced crowd investors react less negatively to failed campaigns overall but are less forgiving of environmental campaign failures than commercial ones. Inexperienced investors show the opposite pattern. Personal values may explain these differences. The research highlights how prior experience and individual characteristics influence responses to failure in sustainable crowdfunding. | <b>Published in</b> Small Business Economics Journal (SBEJ)           | <b>Presented at</b> <i>Academy of Management Proceedings</i> , Chicago, USA, 2024<br><i>Annual Social Entrepreneurship Research Conference</i> , Lausanne, Switzerland, 2024<br><i>International Social Innovation Research Conference (ISIRC)</i> , Guimarães, Portugal, 2023<br><i>Interdisziplinäre Jahreskonferenz zu Entrepreneurship, Innovation und Mittelstand (G-Forum)</i> , Darmstadt, Deutschland, 2023 | C. Lindlar<br>E. A. Jakob<br>J. M. Dinh<br>M. C. Wehner |
| II    | From opportunity to obstacles: The hidden disadvantages of failure for female entrepreneurs in crowdfunding | Stereotype activation and application framework | The study aims to examine how different types of failure (investment vs. entrepreneurial) influence gender bias in crowdfunding, particularly against female entrepreneurs, and explores how venture type (social vs. commercial) affects funding outcomes. | The method comprises a quantitative audio-based vignette study with a sample size of 172, and two metric conjoint analyses with sample sizes of 122 and 108 individuals with investment experience in stocks and funds. | This study shows that lenders exhibit bias against female entrepreneurs after investment failure but not after entrepreneurial failure. Women-led, socially driven ventures face greater funding challenges than men-led, commercial ventures. The study highlights how failure cues reinforce gender bias in crowdfunding, especially in social entrepreneurship.                                                            | <b>Planned Submission to</b> Journal of Business Ethics in April 2026 | <b>Presented at</b> <i>Academy of Management Proceedings</i> , Copenhagen, Denmark, 2025<br><i>Academy of Management Proceedings</i> , Chicago, USA, 2024<br><i>Annual Social Entrepreneurship Research Conference (SE-Conference)</i> , Lausanne, Schweiz, 2024                                                                                                                                                    | C. Lindlar<br>E. A. Jakob<br>L. Schmodde                |

Table 1-1 continued. *Characteristics of the four essays*

| Essay | Title                                                                                             | Theoretical perspective(s) | Research objectives                                                                                                                                                                                                                                                                                              | Method and sample                                                                                             | Results and contributions                                                                                                                                                                                                                                                                                                                                                                                                                                       | Current status                                                                 | Conferences                                                                                                                                                                                                                                                                            | Share of contributions                            |
|-------|---------------------------------------------------------------------------------------------------|----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------|
| III   | A metric-conjoint experiment on crowd lenders' responses to failure attributions of entrepreneurs | Attribution theory         | The study aims to examine how different failure attributions (internal vs. external, controllable vs. uncontrollable, stable vs. unstable) influence lenders' willingness to invest in previously unsuccessful entrepreneurs, and to explore how lender gender affects the interpretation of these attributions. | The method is a metric conjoint analysis among 78 individuals with investment experience in stocks and funds. | This study shows that lenders respond more positively to entrepreneurs who explain past failures with internal, controllable, and unstable attributions. It highlights how attribution style influences funding decisions in crowd lending and reveals gender-based differences in how failure explanations are perceived.                                                                                                                                      | <b>Accepted for publication at</b> International Small Business Journal (ISBJ) | <b>Accepted at</b> <i>Australasian Consortium for Entrepreneurship Research Excellence</i> (ACERE), Sydney, Australia, 2026                                                                                                                                                            | C. Lindlar<br>L. Uebbing<br>L. Pomrehn<br>H. Veer |
| IV    | Understanding failure in impact entrepreneurship – A critical analysis and research agenda        | Conceptual paper           | Failure in social and sustainable entrepreneurship is an emerging and fragmented field with limited literature contributions. This study addresses this gap by providing an overview of current research and outlining a future research agenda.                                                                 | The method is a systematic literature review of 40 studies.                                                   | This study synthesizes fragmented insights and reveals limited conceptual clarity on failure in impact ventures, insufficient attention to emotional antecedents, and a lack of focus on stakeholder interpretations. It proposes a research agenda across four themes: identity-related antecedents, stakeholder perceptions, consequences for beneficiaries and communities, and the normalization of failure, laying a foundation for cumulative theorizing. | <b>Planned Submission to</b> Journal of Business Venturing in April 2026       | <b>Presented at</b> <i>Academy of Management Proceedings</i> , Copenhagen, Denmark, 2025<br><br><i>European Academy of Management</i> (EURAM), Florence, Italy, 2025<br><br><b>Accepted at</b> <i>Annual Social Entrepreneurship Research Conference</i> , Lausanne, Switzerland, 2026 | C. Lindlar<br>E. A. Jakob<br>R. Singaram          |

## 1.2 Research objectives of the four essays

Given that crowd investors often make repeated investment decisions over time (Andersen et al., 2019), examining how failures affect their subsequent behavior is essential for evaluating the implications of failure for future funding acquisition by impact ventures (e.g., Dorfleitner et al., 2023). Hence, **Essay I (Chapter 2)** examines how crowd investors react to failure after successful funding (e.g., *investment failure*) and how their prior crowdfunding experience shapes their reactions. These reactions are particularly salient for impact ventures, as prior research shows that support for such ventures tends to decline more sharply after failure compared to commercial ventures (Hornuf et al., 2021). While existing studies offer valuable initial insights into post-failure crowd investor behavior, scholars have increasingly emphasized the importance of accounting for heterogeneity among crowd investors (Cummings et al., 2020; Mochkabadi & Volkmann, 2020). Notably, crowd investors' experience levels vary considerably (e.g., Battisti et al., 2024), which may influence how investors interpret and react to failure signals (Bafera & Kleinert, 2023; Spence, 1973). For example, recent research indicates that investor experience moderates gender-based preferences. Inexperienced female crowd investors exhibit a stronger preference for female entrepreneurs, whereas this preference diminishes among more experienced female investors (Bapna & Ganco, 2021). Accordingly, the first essay initiates a discussion by investigating how crowd investors react to failure signals from impact ventures, giving particular attention to the moderating role of crowd investors' characteristics, such as prior crowdfunding experience.

Hence, Essay I investigates the following **research question**: *How do crowd investors react to failure signals of impact ventures, depending on their prior crowdfunding experiences?*

To answer this question, Essay I draws on signaling theory (Spence, 1973), which is particularly relevant in the context of crowdlending, where every campaign and interaction between entrepreneurs and crowd investors relies on the transmission and interpretation of signals (Bafera & Kleinert, 2023). This essay employs a multimethod approach, comprising two vignette experiments and one post hoc survey, to examine crowd investors' reactions to failure signals and to identify possible explanatory mechanisms.

The two vignette studies differed only in the specific ventures presented. Each vignette manipulated the promised value orientation of the crowdlending campaigns—social, environmental, or commercial—which served as the foundation for participants' initial and subsequent investment decisions. Throughout the experiments, participants received additional information disclosing the failure of their investment and were then asked to make a future investment decision. Participants' crowdfunding experience was assessed through an open-ended question.

In addition, a post hoc survey was conducted that measured participants' self-enhancement and self-transcendence values. This aimed to identify psychological mechanisms that may explain variations in crowd investors' reactions to the failure of impact versus commercial ventures. The hypotheses were tested using (moderated) ordinary least squares regression (OLS) and analysis of variance (ANOVA).

The findings indicate that differences in prior crowdfunding experience lead crowd investors to respond differently to failure signals. Specifically, experienced investors are more likely to invest after a failure signal than their inexperienced counterparts. However, this trend reverses in the context of impact ventures, particularly environmental ventures, where experienced investors exhibit a stronger aversion to failure. This pattern may be attributed to personal values and greater emotional involvement. Notably, no significant differences were observed in reactions to the failure of social ventures. Post hoc analyses further revealed that

experienced investors differ significantly in their value orientations, which may account for the observed behavioral differences.

Essay I offers new insights into crowd investors' behavior in the post-funding phase, particularly after failures in impact ventures, and demonstrates distinct patterns for environmental, social, and commercial ventures. Thus, it contributes to emerging scholarship on post-funding crowdfunding outcomes and failures (Anglin et al., 2025; Kleinert et al., 2022; McSweeney et al., 2025) and extends the literature on crowd investor characteristics and decision-making processes (Bapna & Ganco, 2021; Dinh & Wehner, 2022; Tenner & Hörisch, 2021) by emphasizing the role of crowd investor crowdfunding experience and value-driven responses.

**Essay II (Chapter 3)** shifts the analysis to entrepreneurial characteristics that may influence crowd investors' reactions to failure. Specifically, it investigates reactions to failure signals in the context of impact ventures by examining how *entrepreneurial gender* affects crowd investors' decision-making in the aftermath of failure.

In crowdlending, campaigns often convey multiple signals beyond their social or environmental missions. Among these, the gender of the entrepreneur is particularly influential, shaped by prevailing gender stereotypes that portray women as inherently nurturing or empathetic and men as agentic and dominant (Balachandra et al., 2019; Gupta et al., 2009; Malmström et al., 2020). These stereotypes have been shown to influence crowd investor perceptions and behaviors, particularly in the pre-funding phase (Anglin et al., 2022; Bapna & Ganco, 2021; Johnson et al., 2018).

Unlike traditional investors, crowd investors have been identified to offer more equitable funding opportunities to women (Johnson et al., 2018), especially in the context of impact entrepreneurship (Anglin et al., 2022). This potential for greater inclusion, however, contrasts with the high default rates typical of crowdlending (Vanacker et al., 2019). In

traditional investment contexts, failure disproportionately harms female entrepreneurs. As demonstrated in prior research, traditional investors are more likely to attribute men's failures to external factors (e.g., bad luck) and women's failures to internal deficits (e.g., lack of ability). Hence, failure significantly reduces women's chances of securing future funding (Pistilli et al., 2022). It remains unclear how the gendered nature of failure signals plays out in the crowdfunding context, particularly for female entrepreneurs in impact ventures. Thus, Essay II addresses the following **research question**: *How do crowd investors evaluate female entrepreneurs when investment and entrepreneurial failure experiences become salient?*

Essay II deepens the analysis of crowd investor reactions to failure, exploring how gendered perceptions intersect with failure experiences to shape investment behavior in crowdlending. In addition, the essay further extends the contribution of Essay I by examining two types of failure. It focuses on *entrepreneurial failure*, defined as an entrepreneur's history of unsuccessful ventures (Roccapriore et al., 2021; Zunino et al., 2022) and *investment failure*, which arises when entrepreneurs who have secured funding are unable to repay loans and interest, often due to operational challenges or business closure, thereby generating losses for crowd investors (Dorfleitner et al., 2023; Hornuf et al., 2021). These failure types, situated at different stages of the financing process, function as critical signals that influence crowd investor evaluations and behaviors. Accordingly, Essay II examines both dimensions of failure: (1) crowd investors' reactions toward entrepreneurs with a history of failure and (2) the behavioral reactions of crowd investors who have personally experienced investment failure.

To investigate this research question, Essay II employed the stereotype activation and application framework (Kunda & Sinclair, 1999; Kunda & Spencer, 2003; Wheeler & Petty, 2001), which posits that situational cues, such as failure, can trigger and shape the application of stereotypes. Essay II utilized a multimethod experimental approach to examine the effects

of failure on crowd investors' investment decisions. Study 1 ( $n = 172$ ) utilized an audio-based vignette experiment to assess crowdlending behavior following self-experienced investment failure. Study 2 ( $n = 122$ ), along with a robustness check ( $n = 108$ ), employed a metric conjoint experiment to explore the effects of prior entrepreneurial failure on crowd investors' funding decisions. Statistical analyses were conducted using OLS regression for Study 1 and multilevel regression for Study 2.

The results indicate that crowd investors are less likely to invest after experiencing investment failure and prefer male over female entrepreneurs in future funding decisions. Additionally, female entrepreneurs who position their ventures as socially driven face greater challenges in securing investment than male entrepreneurs with commercially focused ventures. However, concerning prior entrepreneurial failure, no significant gender-based or venture-type differences in crowdlending outcomes were observed. Nevertheless, entrepreneurs with a history of failure are generally less likely to receive funding compared to those with successful or no prior investment experience.

In this vein, Essay II advances the discussion on gender gaps in entrepreneurial financing (e.g., Bapna & Ganco, 2021; Kleinert & Mochkabadi, 2022) and enriches the emerging literature on failure in impact entrepreneurship (Bacq et al., 2025; Muñoz et al., 2020; Singaram et al., 2024). It highlights the importance of distinguishing among different types of failure and underscores how these distinctions influence crowd investor behavior, particularly amid the growing funding challenges faced by female social entrepreneurs.

**Essay III (Chapter 4)** investigates the potential of failure explanations to help entrepreneurs regain crowd investor trust and secure funding. Specifically, Essay III explores whether providing additional signals, such as failure attributions, can be effective in crowdlending contexts. This approach aligns with emerging insights that suggest that how entrepreneurs explain their past failures may influence crowd investor perceptions,

particularly when these explanations convey learning and resilience (Zunino et al., 2022). In this context, entrepreneurs' ability to reflect on and articulate what they have learned from failure may enhance investors' perceptions of their competence and increase the likelihood of future success, thereby shaping crowd investor decision-making. Therefore, Essay III examines how crowd investors react to different types of failure attributions from entrepreneurs, including both commercial and impact ventures.

To explore these dynamics, Essay III applies attribution theory (Weiner, 1985), which posits that individuals' interpretations of failure are shaped by three core dimensions: *locus* (internal vs. external causes), *stability* (stable vs. unstable), and *controllability* (controllable vs. uncontrollable). For example, entrepreneurs may attribute failure to internal errors (e.g., miscalculating costs) or external causes (e.g., non-paying customers), to controllable factors (e.g., insufficient cost control) or uncontrollable conditions (e.g., intense market competition), and to unstable reasons (e.g., a one-time misjudgment) or stable patterns (e.g., recurring and unavoidable market failures). In addition, Essay III introduces a key boundary condition that complements the crowd investor heterogeneity perspective developed in Essay I. While previous research has demonstrated the significance of individual characteristics in shaping crowd investors' reactions to failure, Essay III further explores heterogeneity by focusing on gender differences among crowd investors. In doing so, it offers a novel contribution by examining whether male and female crowd investors interpret attributions of entrepreneurial failure differently, thereby influencing their investment behavior. Thus, Essay III investigates the following **research questions**: *How do crowd lenders react to distinct failure attributions of entrepreneurs? How does the gender of crowd lenders impact their reactions to an entrepreneur's attribution of failure?*

To address these research questions, Essay III employed a metric conjoint experiment with 78 participants, yielding 2,496 observations based on 32 systematically varied venture



profiles. Each profile manipulated three dimensions of failure attribution—causality, controllability, and stability—as well as the venture’s mission (environmental vs. commercial). Participants assessed the likelihood of investing in each venture, simulating real-world crowdlending decisions by evaluating multiple signals simultaneously. The data were analyzed using linear mixed-effects models to account for repeated measures and individual variation. Findings reveal that crowd investors react more positively to internal, controllable, and unstable failure attributions and, consequently, exhibit a higher willingness to invest. More specifically, crowd investors exhibit a preference for explanations that reflect internal, unstable causes over external, stable ones, as well as for controllable, unstable causes over uncontrollable, stable ones. These patterns suggest that attributions signaling entrepreneurial agency and potential for change enhance crowd investors’ perceptions of future success.

Furthermore, gender differences among crowd investors emerge as a significant moderating factor. Female investors react more positively to external than to internal failure attributions, and to controllable than to uncontrollable failure attributions, compared to their male counterparts. Notably, the results reveal no significant differences in investor responses between commercial and environmental ventures, consistent with the outcomes of Essay II. These findings contribute to the literature on failure in entrepreneurship, particularly in crowdfunding. Moreover, this study emphasizes the stakeholder’s perspective, examining how crowd investors react to failure (Anglin et al., 2025; Jenkins & McKelvie, 2016). By identifying which types of attributions are viewed more favorably, Essay III provides valuable insight into the mechanisms through which failed entrepreneurs can regain crowd investor confidence and improve funding outcomes.

Essays I–III, which investigate how crowd investors react to failure, establish an empirical foundation for **Essay IV (Chapter 5)**. Building on this foundation, Essay IV

broadens the analytical scope and offers a theoretical synthesis of stakeholder reactions to failure and the mechanisms that influence their behavior. While the Essays I-III focus on a specific stakeholder group (crowd investors), impact ventures are usually embedded in a broader and more heterogeneous network of stakeholders (Raith & Starke, 2017). These relationships are often complex, making stakeholder reactions to failure more nuanced and challenging to interpret.

The empirical findings from Essays I–III reveal important conceptual blind spots in the failure literature, particularly regarding the diversity of stakeholder perspectives and the distinct characteristics of impact ventures. Moreover, these essays expose theoretical limitations commonly applied to understand reactions and decision-making. For instance, theories such as signaling theory (Spence, 1973) and stereotype frameworks (Kunda & Sinclair, 1999), when applied in prior research (Ahlers et al., 2015; Alsos & Ljunggren, 2017), are primarily used to explain pre-failure/funding decision-making. In contrast, failure itself and the post-failure phase, including how negative outcomes are interpreted and how stakeholder evaluations evolve, remain poorly theorized. This highlights the need to extend existing theories beyond the pre-failure phase to better account for the post-failure phase.

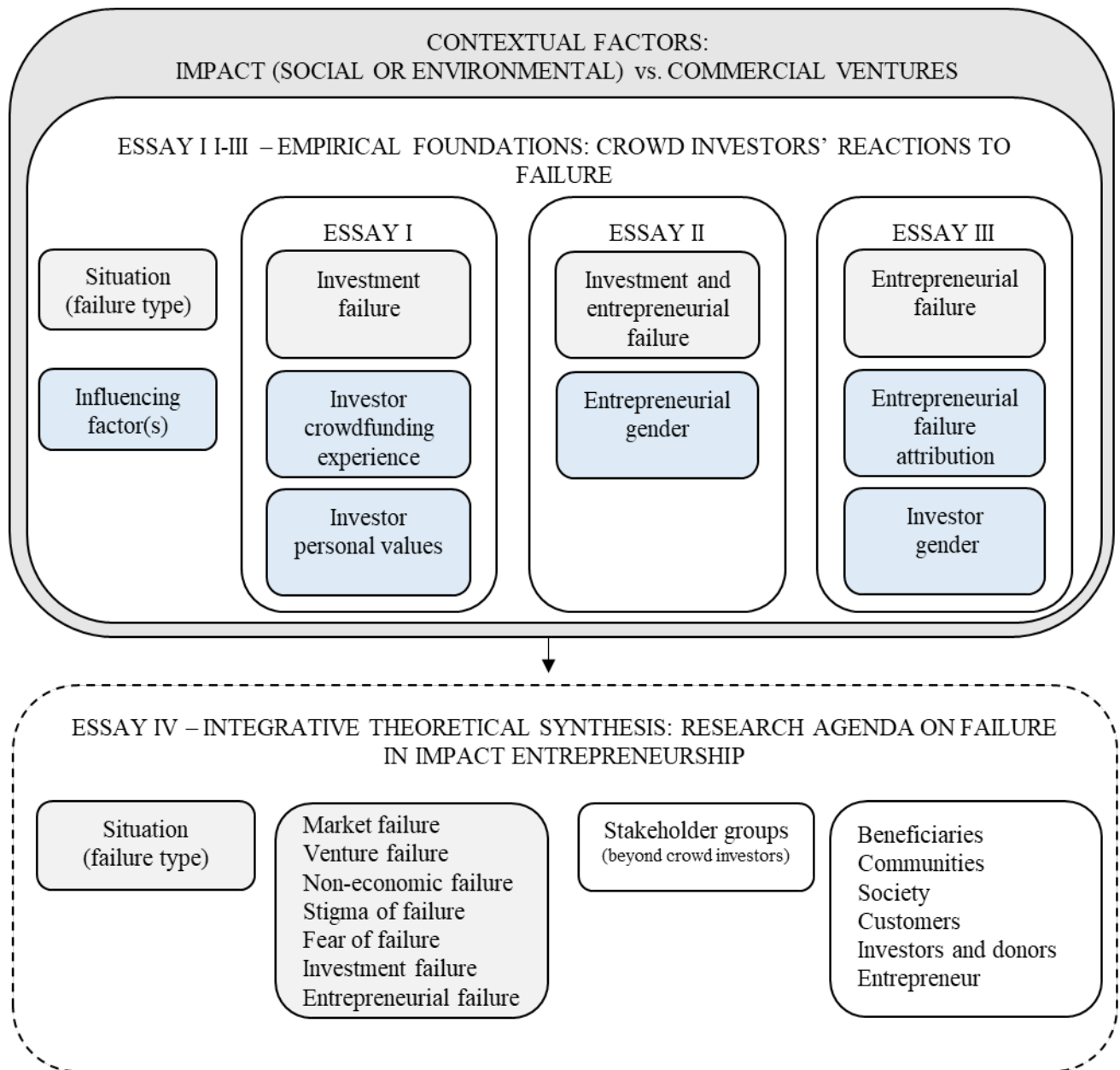
Against this background, Essay IV concludes this dissertation by synthesizing and critically reflecting on the failure literature through the lens of impact ventures and stakeholder diversity. It positions crowd investor reactions within a broader stakeholder framework, underscores the complexity of failure across diverse stakeholders, and provides avenues for future research to extend existing theoretical perspectives.

Hence, the fourth essay raises and answers the following two **research questions**:  
*What do we know about failure in impact entrepreneurship on both the stakeholders' and the entrepreneurs' sides? What challenges need to be addressed to theoretically, empirically, and practically move this research strand forward?*

To answer these research questions, Essay IV presents a systematic literature review of 40 peer-reviewed articles, serving as a strategic starting point for consolidating and advancing research in the field. The review is structured around three central pillars: (1) the antecedents of failure, focusing on the pre-failure phase and contributing factors; (2) the multidimensional nature of failure, distinguishing between economic and non-economic dimensions; and (3) the post-failure phase, which considers how diverse stakeholders, such as impact entrepreneurs, beneficiaries, customers, funders, and society at large, interpret and react to failure.

Against this background, Essay IV contributes to the fragmented conversations on failure in impact entrepreneurship across social, sustainable, and nonprofit literatures (Bacq et al., 2025; Czakon et al., 2024; Vallaster et al., 2019), clarifying conceptual assumptions and advancing a multidimensional view of failure that includes both economic and non-economic dimensions (Saebi et al., 2019).

**Figure 1-1** presents an overview of the interrelationship between the four essays, focusing on the themes of failure, stakeholder reactions, and impact entrepreneurship. The shaded area represents the core empirical focus of this dissertation, which is crowd investors' reactions to failure, specifically in the context of comparing impact and commercial ventures. Through an in-depth examination of two distinct failure situations and their corresponding influencing factors, Essays I–III reveal how crowd investors' reactions differ depending on the type of venture. In addition to these distinctions, as previously discussed, stakeholder groups of impact ventures extend beyond crowd investors. The dashed boundary surrounding Essay IV symbolizes this broader perspective, pointing to the need for a more comprehensive research agenda that accounts for the complexity of failure in impact entrepreneurship and the diversity of stakeholder responses.

**Figure 1-1: Overview of four essays**

## **2. Failure signals in sustainable crowdfunding: Distinct reactions driven by crowd investors' experience (Essay I)**

### **Abstract**

A significant number of crowdfunding campaigns, including sustainable campaigns, fail after securing successful funding. Although failure implies investment losses for crowd investors and potentially impacts investors' future investment behavior, our understanding of how crowd investors respond to failures remains limited. This study proposes that prior crowdfunding experience explains important differences in crowd investors' reactions to failure signals. Drawing on signaling theory, we argue that prior crowdfunding experience results in less adverse reactions to failure signals. Moreover, we propose that crowdfunding experiences explain differences in the reactions to failure signals of sustainable campaigns. Two vignette-based experiments (Studies 1 and 2) reveal that experienced investors react less negatively to investment failures than those without this experience. Further, our studies show a reverse effect for sustainable campaigns, suggesting that experienced crowd investors tend to be less forgiving of failures in environmental campaigns than commercial ones, compared to inexperienced crowd investors. An additional empirical survey indicates that a possible explanation for the differences between crowd investors' reactions may be found in the specific personal values of crowd investors. We contribute to entrepreneurial finance and crowdfunding literature by showing how experienced crowd investors interpret conflicting signals—failure and sustainability—emphasizing the role of investor characteristics in shaping signal effectiveness.

### **Plain English summary**

Sustainable ventures face significant funding challenges, especially after failures. Our research finds that while crowd investors with crowdfunding experience generally react more forgivingly to failures, they are notably less lenient with environmental campaigns, exhibiting a "double loss" (losing financial return and sustainable impact) and reducing subsequent investments. This double loss phenomenon is an important finding for entrepreneurial finance research and suggests that expectations of environmental ventures carry particular weight. Recognizing differences in crowd investors' behavior depending on their diverse backgrounds is vital for addressing how various campaigns—environmental or commercial—produce joint effects with failure signals and change crowd investors' future behavior. Our study offers actionable insights for entrepreneurs and crowdlending platforms. Entrepreneurs should recognize that experienced crowd investors are more likely to reinvest despite past failures, emphasizing the need for building a community with recurring crowd investors. To encounter the double loss effect concerning environmental campaigns, crowdlending platforms may mitigate negative reactions by increasing transparency about the potential risks as well as impacts of environmental campaigns by providing frequent updates on campaigns and offering educational initiatives on the nuances of sustainability.

**Keywords:** crowd investor, experience, failure, investment behavior, sustainable ventures

**JEL Classification** L26 A13 G23 M13 Q01

## **2.1 Introduction**

Crowdfunding has emerged as a vital funding mechanism for young ventures, in particular sustainable ventures (Penz et al., 2022; Slimane & Rousseau, 2020), and an interesting investment option for a distinctly motivated crowd (e.g., Mollick, 2014). Due to high information asymmetry between ventures and crowd investors, signaling (e.g., the ventures' environmental/social value) is an important mechanism to explain a campaign's success (e.g., Allison et al., 2015; Calic & Mosakowski, 2016; Siebeneicher & Bock, 2022). While signaling is crucial to understanding how crowdfunding campaigns succeed, failure equally shapes crowdfunding dynamics (e.g., Vanacker et al., 2019). Approximately one-third of ventures in crowdlending fail to deliver on their promises, leading to investment losses for investors (Civardi et al., 2023; Iyer et al., 2015). In crowdlending, where ventures offer loans at fixed interest rates, a failure implies a loss of the expected financial return as well as investment (Böckel et al., 2020; Slimane & Rousseau, 2020), and in the case of sustainable campaigns, even the loss of the promised social and/or environmental value. Thus, failure is crucial as it is an informational signal from entrepreneurs or platforms to the crowd likely to affect future investment behavior (Huang et al., 2022; Taj, 2016).

So far, the theoretical understanding of how failure signals impact crowd investors' decisions, particularly in sustainable campaigns, remains limited (e.g., Dinh et al., 2024; Hornuf et al., 2021; Huang et al., 2022). Recent research has just started to explore failure signals in the context of crowdfunding (e.g., Dorfleitner et al., 2023; Kgoroadira et al., 2019), examining aspects such as how prior entrepreneurial failure signals influence investors' support of a campaign (Huang et al., 2022). However, there remains a dearth of knowledge concerning failure signals that follow successful fundraising and crowd investors' reactions to these (Hörisch, 2019). Recent research has begun to shed light on this area, revealing that crowd investors experience a significant "default shock" after an investment

failure (Dorfleitner et al., 2023). Additionally, research in sustainable crowdfunding has further demonstrated that support for sustainable campaigns tends to diminish more sharply after failures than commercial campaigns (Hornuf et al., 2021). While these studies provided valuable initial insights into crowd investors' reactions after failure, scholars have increasingly highlighted the importance of considering the diversity among crowd investors (Cummings et al., 2020; Mochkabadi & Volkmann, 2020). In particular, crowd investors differ significantly in their levels of experience (e.g., Battisti et al., 2024), which can influence their reactions to signals (Bafera & Kleinert, 2023; Spence, 1973). For example, recent research highlights that crowd investors' reactions vary by experience level, with inexperienced and experienced investors showing differing preferences for female- and male-led ventures (Bapna & Ganco, 2021) and diverse investor types reacting differently to legitimacy signals (Fisher et al., 2017). Given these distinctions, we propose that the effect of failure signals on crowd investors depends on their prior experience. This may be particularly evident in crowdlending, as these platforms are highly inclusive and attract investors from diverse backgrounds (Burtch et al., 2014; Dushnitsky et al., 2016). Therefore, we ask *how do crowd investors react to failure signals of sustainable campaigns depending on their prior crowdfunding experiences?*

By drawing on signaling theory (Spence, 1973), our study proposes that the effect of signals, including failure and sustainability, depends on the prior experience of crowd investors. First, we argue that the negative effect of failure signals is buffered when investors have prior crowdfunding experience. This may be due to distinct cognitive mechanisms shaped by learning experiences. Experienced crowd investors develop a refined cognitive framework that influences their ability to interpret signals, such as failure, more accurately (Bapna & Ganco, 2021) and enhances resilience in the face of failures (Chu et al., 2014). Second, we propose a reversed effect in the context of sustainable campaigns (i.e., social or



environmental), expecting that, unlike typical resilience to failure signals, experienced crowd investors may respond more negatively when they experience failure signals in the context of sustainable campaigns. This reverse effect may be attributed to distinct values and higher emotional involvement (Moysidou & Spaeth, 2016), which play a certain role in interpreting signals, especially in threatening situations (e.g., Bar-Haim et al., 2006).

Our findings align with these theoretical propositions, demonstrating that experienced crowd investors react differently to failure signals compared to their inexperienced counterparts. Specifically, we observed that experienced crowd investors are more likely to invest after receiving failure signals than inexperienced crowd investors, reflecting their distinct cognitive framework. However, this pattern reversed in the context of environmental campaigns. Experienced crowd investors exhibit a stronger adverse reaction to environmental campaigns' failure signals than to commercial campaigns, potentially driven by personal values and emotional involvement. Interestingly, we found no significant differences in reactions to social campaigns. Post hoc analyses further revealed that experienced investors differ significantly in their values, which may explain their unique behavioral patterns.

This study offers three main contributions to previous research. First, we advance entrepreneurial finance research by examining crowd investor behavior after the failure of ventures that previously secured successful funding (Dorfleitner et al., 2023; Hornuf et al., 2021). While prior studies suggest that entrepreneurial failures may increase an entrepreneur's appeal by signaling resilience and learning (Huang et al., 2022; Souakri et al., 2023), we find that investment failures trigger negative reactions from experienced and inexperienced crowd investors. This highlights the need to distinguish between entrepreneurial failures, signaling valuable learning experiences as focused on in previous studies (Roccapriore et al., 2021; Zunino et al., 2022), and investment failure, implying crowd investors' personal loss. By adding the investment failure perspective, we extend research into the varied effects of failure

signals (e.g., Huang et al., 2022; Kleinert et al., 2022; Piening et al., 2021; Roccapriore et al., 2021; Rossi et al., 2023).

Second, we advance crowdfunding research by demonstrating the critical role of investor experience in interpreting failure and sustainability signals (Battisti et al., 2024; Cummings et al., 2020), moving beyond studies that treat crowd investors as a homogenous group (e.g., Davis et al., 2017; Dinh & Wehner, 2022). Contrary to earlier work suggesting uniform investor responses, we show that experienced investors tend to be more forgiving of investment failures, potentially due to significantly higher self-transcendence values. This underscores the importance of recognizing crowd investors' diverse characteristics, which may shape their cognitive and emotional reactions to investment signals in complex and context-specific ways.

Third, we contribute to signaling theory by showing that the effectiveness of signals varies depending on the investor type and campaign context. Our findings extend the literature on signaling in entrepreneurship (Bafera & Kleinert, 2023; Huang et al., 2022; Rodríguez-Garnica et al., 2024) and sustainable entrepreneurship (e.g., Cervelló-Royo et al., 2020; Penz et al., 2022) by revealing that experienced investors react more negatively in environmental campaigns than in commercial ones. This highlights the dynamic interaction between conflicting signals: failure, which suggests a lack of competence (e.g., Zunino et al., 2022), and environmental signals, which imply responsibility and positive impact (e.g., Siebeneicher & Bock, 2022). Thus, we enrich signaling theory in the context of entrepreneurship (Bafera & Kleinert, 2023) by emphasizing how conflicting signals are interpreted differently depending on investor characteristics and contextual factors, highlighting the variability in their effectiveness across diverse audiences and situations.

## **2.2 Theoretical background and hypotheses**

### **2.2.1 Crowdlending and investors' experience**

*Crowdlending*, also named lending- or debt-based crowdfunding, has emerged as the prevailing force within the crowdfunding market landscape, contributing to over 60% of the global crowdfunding revenue in 2022 (GrandViewResearch, 2022). In particular, sustainable ventures find significant potential in crowdlending as they, for example, aim to reduce greenhouse gas emissions and, hence, do not offer material rewards, which are prevalent in reward-based crowdfunding (Hörisch, 2019). In crowdlending, entrepreneurs seek capital to obtain loans from nontraditional investors. In return for these loans, entrepreneurs promise interest on the loan amount for the project's duration (Bruton et al., 2015). Upon successful funding, meaning the campaign has reached its capital goal, outcomes include either repayment of the loan with interest to all investors or, in the event of venture failure, non-repayment and loss of funds for the investors (e.g., Dorfleitner et al., 2023; Vanacker et al., 2019). The impact of such failure extends beyond the entrepreneurs (e.g., Piening et al., 2021; Smollan & Singh, 2021) and affects investors because encountering a failure signifies an investment failure and influences investors' perception of risk and future campaign evaluations (e.g., Roccapriore et al., 2021). Crowdlending is suitable for studying how investors react to failure due to its inherent risk of failure (Vanacker et al., 2019). Given the challenges of identifying high-potential ventures in risky environments like crowdlending, investors' experience likely plays a key role in their decisions (Bapna & Ganco, 2021). The involvement of a diverse range of investors—including small-scale individual investors, friends, and family members, and those with prior crowdfunding experience—makes it an ideal context for comparing behaviors and decision making among different types of investors, who may react differently to failure (Burtch et al., 2014; Cumming & Hornuf, 2022; Dushnitsky et al., 2016; Hornuf et al., 2020).

Existing research underscores the importance of prior crowdfunding experience in investor decision making (e.g., Kim & Viswanathan, 2019; Mochkabadi & Volkmann, 2020). For instance, Bapna and Ganco (2021) found that inexperienced and experienced equity crowd investors engage in distinct cognitive mechanisms, leading to different interest levels in ventures based on the entrepreneurs' gender. Additionally, Hornuf et al. (2020) showed that more experienced crowd investors exhibit a local bias, while Kim and Viswanathan (2019) demonstrated that experienced investors' expertise disproportionately influences later investors in crowdfunding markets. The insights and patterns established through previous investments profoundly shape how investors evaluate future opportunities (e.g., Dorfleitner et al., 2023; Hornuf et al., 2021). The frequent reengagement of experienced investors, evidenced by high rates of repeated investment in the crowdlending sector (Andersen et al., 2019), underscores the relevance of experience in their decision making. Therefore, understanding the differences in how experienced and inexperienced crowd investors process signals is critical, as distinct cognitive mechanisms likely drive distinct responses in future investment behavior.

### **2.2.2 Signaling theory**

Signaling has been extensively studied in the management literature (e.g., Banks et al., 2019; Eckardt et al., 2018; Taj, 2016; Venkataramani et al., 2022) and has begun to be investigated in entrepreneurship (e.g., Ahlers et al., 2015; Bafera & Kleinert, 2023; Battisti et al., 2024). Signaling aims to influence the audience and its desired outcomes by signaling informational cues (signals) sent from one entity, the signaler, to another, the receiver (Taj, 2016). Prior research suggests that investors often evaluate the intangible qualities of a venture's potential by interpreting signals from entrepreneurs and the venture's attributes (Connelly et al., 2011). Signaling theory (Spence, 1973) provides a framework for understanding the types of information that influence investors' decisions, such as the

characteristics of the entrepreneur (Ahlers et al., 2015), the language used in the campaign (Anglin, Short, et al., 2018), or the venture's mission (Berns et al., 2020). This theory explains how entrepreneurs use meaningful signals to reduce information asymmetries and secure resources (Connelly et al., 2011; Spence, 1973; Steigenberger & Wilhelm, 2018). In crowdfunding, information asymmetry is prevalent (Courtney et al., 2017), fulfilling a crucial condition of signaling theory (Spence, 2002). Usually, entrepreneurs (signalers) send positive signals, such as entrepreneurs' credibility or project quality (Huang et al., 2022), and avoid sending negative signals (Taj, 2016). However, sending negative signals becomes unavoidable in the case of venture failure. Venture failure arises when "a fall in revenues and/or a rise in expenses are of such a magnitude that the firm becomes insolvent and is unable to attract new debt or equity funding; consequently, it cannot continue to operate under the current ownership and management" (Shepherd, 2003, p. 318).

Steigenberger and Wilhelm (2018) discovered that signals are interpreted not only for their content but also through connotative meanings, which draw more attention and increase the visibility of the content signals. They identify three main ways signals can influence the audience: emotionally (pathos), logically (logos), and by boosting the sender's credibility (ethos). Signals emphasizing camaraderie and community behavior, for example, through social or sustainable goals, tend to be emotionally charged (e.g., Liang et al., 2023; Steigenberger & Wilhelm, 2018). Additionally, alarming statements designed to elicit concern, for example, through failure signals, may also appeal to emotions. Conversely, signals highlighting a venture's economic activities or capabilities tend to appeal to reasoning and logical processes by the receiver (Steigenberger & Wilhelm, 2018).

### **2.2.3 Failure signals and crowdfunding experience**

Although signals are intended to convey information, how they are perceived and interpreted depends on the receivers and, thus, influences behavior. Hence, various receivers

can interpret signals differently (Connelly et al., 2011; Taj, 2016). Connelly et al. (2011) found that the receiver's characteristics, such as education, motivations, emotion, values, and experience, determine the signals' effectiveness. Similarly, Bafera and Kleinert (2023) identified that receiver ability can influence signal interpretation across various entrepreneurial finance research. Receivers' ability relates to detecting and comprehending signals depending on their capacity, which is influenced by their specific knowledge, backgrounds, and experiences (e.g., Allison et al., 2017). Receivers can only respond to signals they notice and understand, but this ability varies among individuals due to unique characteristics (Bafera & Kleinert, 2023).

In the context of crowdfunding, research has shown that prior experience can influence signal interpretation (Bapna, 2017; Bapna & Ganco, 2021). Therefore, we hypothesize that crowd investors with distinct experience levels react differently to failure signals generally and in particular in the context of sustainable campaigns. We distinguish between two types of crowd investors: (1) *inexperienced investors* who are new to crowdfunding but have general knowledge of investments in stocks and other funds and (2) *experienced investors* with previous crowdfunding experience in any other crowdfunding type. We propose that the crowdfunding experience implies at least two essential factors that enable distinct cognitive processes (Bapna, 2017; Bapna & Ganco, 2021). On the one hand, missing crowdfunding experience may lead to overemphasizing the initial experience in this context for future investment decisions among inexperienced crowd investors. On the other hand, experience in the crowdfunding context may help to cope with failure.

Crowdfunding experience may result in different behaviors among crowd investors because of diverging learning experiences (Bapna, 2017; Bapna & Ganco, 2021). Generally, individuals "learn by using the outcomes of their actions (feedback) to revise their beliefs" (Shepherd, 2003, p. 320). As such, experienced crowd investors, shaped by learning

experiences (Choo & Trotman, 1991), develop a refined cognitive framework (Choo & Trotman, 1991), influencing their ability to interpret signals (Bapna & Ganco, 2021). In contrast, inexperienced investors often find it challenging to interpret signals (Bapna & Ganco, 2021). Research in the general investment context supports the idea that experience in a specific domain (Choo & Trotman, 1991) helps experienced investors better cope with ups and downs (Chu et al., 2014; Koestner et al., 2017). In that vein, research shows that experienced investors are more likely to reinterpret a loss as a valuable learning opportunity, often attributing investment failures to their own decisions rather than blaming the market or external factors (Chu et al., 2014). Hence, experience allows investors to interpret signals, such as failure signals, more accurately (Bapna & Ganco, 2021) and enhances resilience in the face of failures (Chu et al., 2014). This may also be evident in crowdlending, where despite approximately one-third of loans defaulting (Iyer et al., 2015; Vanacker et al., 2019), investors often continue to engage after experiencing failures (Andersen et al., 2019; Shneor et al., 2024). Hence, experienced crowd investors may understand that failure is an inherent aspect of the process, particularly in crowdlending, due to the higher risks associated with early-stage ventures or small and young businesses (Vanacker et al., 2019).

In contrast, for investors experienced in traditional assets but new to crowdfunding, a loss in their initial crowd investment can disproportionately negatively impact their perceptions and future decisions. Unlike experienced crowd investors, who had the chance to develop a more nuanced understanding of risks specific to crowdfunding, newcomers lack the experiential framework needed to contextualize such losses. Psychology literature shows in several contexts that initial information or early impressions can serve as a cognitive anchor, with early outcomes heavily influencing future attitudes and perceptions in unfamiliar domains (Furnham & Boo, 2011; Tversky & Kahneman, 1974). Thus, losing their first crowdfunding experience may anchor these investors' perception of crowdfunding as

particularly high-risk, leading to an outsized aversion to further involvement. This aversion may increase because individuals experience losses more intensely than equivalent gains, impacting their decision-making and risk assessment (Kahneman & Tversky, 1979).

Concerning individual investors in the traditional investment context (i.e., stock trading), Barber and Odean (2013) reinforce this view by arguing that initial investment losses often lead to heightened caution and risk aversion in subsequent decisions, as investors are likely to overemphasize the riskiness of crowdfunding based on their first experience. Additionally, Thaler's (1999) insights into mental accounting suggest that first-time investors may compartmentalize crowdfunding as a separate, higher-risk category based on this initial experience. Consequently, without the benefit of varied experiences, these inexperienced investors may overemphasize the risks associated with crowdfunding and become hesitant to re-engage, even in future, potentially more successful ventures. Hence, we hypothesize:

**Hypothesis 1 (H1).** *Experienced crowd investors allocate higher investments after encountering a failure signal than inexperienced crowd investors.*

#### **2.2.4 Failure signals, sustainable campaigns, and crowdfunding experience**

We propose that the crowdfunding experience will play a reversed role in the context of sustainable campaigns as this context may elevate emotional arousal in addition to the cognitive mechanisms described before. Emotions play an important role in interpreting signals, especially in threatening situations (e.g., Bar-Haim et al., 2006). In crowdfunding, emotional involvement is also critical in decisions among experienced crowd investors (Moysidou & Spaeth, 2016). Emotional reactions and other soft factors often replace hard data in crowdfunding investment decisions (Hoegen et al., 2018). Thus, emotional involvement in crowdfunding campaigns (Moysidou & Spaeth, 2016) may be present in the case of success and failure (Makki & Van Hemmen, 2022).



Signals related to sustainability (Liang et al., 2023) carry a strong emotional charge (Steigenberger & Wilhelm, 2018), potentially increasing their appeal to experienced crowd investors. Although sustainable signals initially attract positive attention (Liang et al., 2023), those signals may trigger adverse emotional reactions when occurring together with failure signals. Specifically, failure signals, processed according to sustainable (social or environmental) signals, may harm future funding possibilities compared to commercial signals by experienced crowd investors. Since signals can be interpreted by cognitive mechanisms but are also influenced by personal characteristics (Bafera & Kleinert, 2023; Connelly et al., 2011), such as emotions and values, we believe these factors impact how experienced and inexperienced investors react to those signals.

Experienced crowd investors who typically hold higher self-transcendence values (Tenner & Hörisch, 2021), including strong biospheric values like deep concern for humanity and the environment (Schwartz, 1992), tend to react more intensely to both positive and negative sustainable signals (Conte, Brosch, et al., 2023; Conte, Hahnel, et al., 2023). Specifically, when negative sustainable signals arise—such as failing to achieve a sustainable impact—individuals with strong self-transcendence values often experience more intense negative emotions (Conte, Brosch, et al., 2023; Conte, Hahnel, et al., 2023). This is because they interpret these failures as threats to deeply held sustainable beliefs and values (Conte, Hahnel, et al., 2023). In the crowdfunding context, experienced crowd investors, who often support campaigns based on shared sustainable values, similarly hold high expectations for positive social and environmental impacts alongside financial returns (Bocken, 2015). Consequently, when a sustainability campaign fails, these investors may face an intense emotional reaction regarding the loss experienced: the financial loss and the unfulfilled positive, sustainable impact (Hornuf et al., 2021), threatening their core beliefs (Conte, Hahnel, et al., 2023). This dual loss may invoke negative cognitive stress (Thoits, 1995),

which may deepen frustration and discouragement and reduce their likelihood of investing in future sustainability campaigns. We contend that emotionally charged signals, such as those associated with sustainability and failure, amplify the negative impact and are likely to provoke quicker and more intense reactions by experienced crowd investors (e.g., Steigenberger & Wilhelm, 2018).

Conversely, we expect that inexperienced crowd investors are more likely to invest in sustainable campaigns after encountering a previous failure. We assume inexperienced crowd investors are less emotionally involved, which may be attributed to different prevalent values, such as self-enhancement values, leading to a distinct emotional intensity (e.g., Schwartz, 1994a). Hence, we believe inexperienced crowd investors show less emotional involvement linked to the failed sustainable impact and, therefore, focus more on themselves than on the invested projects (e.g., Czaja & Röder, 2020). Moreover, inexperienced investors often exhibit overconfidence in their investment knowledge (Czaja & Röder, 2020), leading them to underestimate risks and overestimate their ability to predict market movements (Barber & Odean, 2013). This overconfidence exposes them to higher levels of risk, particularly in sustainable projects, which are characterized by higher uncertainty and multiple goals (Bacq & Janssen, 2011; Cervelló-Royo et al., 2020), making them riskier investments compared to other projects. Given this, we hypothesize:

**Hypothesis 2 (H2).** *Experienced crowd investors allocate lower investments after encountering failure signals for a) environmental or b) social campaigns than inexperienced crowd investors.*

### 2.3 Overview of studies

We conducted three studies with independent samples. For Studies 1 and 2, we conducted vignette experiments based on a between-subject design to measure social judgments and analyze causal relationships (Aguinis & Bradley, 2014; Hsu et al., 2017).

Vignettes are brief, descriptive scenarios presented to participants with specific situations and characters, aiming to explore their reactions or decisions (Aguinis & Bradley, 2014; Atzmüller & Steiner, 2010). While previous studies primarily relied on platform content analysis to understand what attributes make crowd investors invest in crowdfunding (Allison et al., 2015; Calic & Mosakowski, 2016; Parhankangas & Renko, 2017), there is still a lack of platform data on post-funding updates and failures from investors' perspectives. While campaign failures are publicly disclosed, the specific responses of individual crowd investors to such post-funding activity failures are typically not shared publicly, as platforms usually keep such information private. Hence, we follow other entrepreneurship research (Fellnhöfer & Deng, 2023; Mueller & Shepherd, 2016) by employing two experimental vignettes. In doing so, we can observe causal reactions to failure while manipulating and controlling for selected factors unavailable in platform data. To explore potential explanations for the observed behaviors, we conducted a post hoc survey assessing the personal characteristics and values of experienced and inexperienced crowd investors. Specifically, we examined differences in self-transcendence and self-enhancement values (Dinh & Wehner, 2022; Tenner & Hörisch, 2021), offering further insight into how crowd investors' characteristics influence investment behavior.

### **2.3.2 Overview study design: Study 1 and Study 2**

In both studies, we initially presented participants with investment campaigns (social, environmental, and commercial), followed by the failure signal inducing investment loss among crowd investors. Participants were randomly assigned to one of the three experimental vignettes, each signaling a different value: social, environmental, or commercial. By employing these three experimental vignettes, we follow the approach taken by previous studies examining differences between these campaigns, supporting the triple bottom line (e.g., Nielsen & Binder, 2021; Siebeneicher & Bock, 2022). To examine experienced and

inexperienced crowd investors' reactions to a failure signal, we designed an experimental setting involving both the prefunding phase, where participants were asked to make an initial investment decision, and the post-funding phase, where they faced the failure signal indicating a loss of their investment. This approach aimed to create a more realistic decision-making context that resembled actual investment scenarios. The prefunding phase increased the authenticity of the subsequent investment failure and allowed for a more comprehensive understanding of participants' reactions (e.g., Schaubroeck & Williams, 1993). The experiment commenced with a uniform introduction provided to all participants, presenting the concept of crowdlending and prompting them to envision themselves on a return-oriented crowdlending platform called *Investia* (see Appendix A1). Alongside general information, participants were informed about the potential occurrence of investment failure, which could lead to a partial or total loss of their investment. As we focus on the context of return-oriented crowdlending, participants were offered a hypothetical financial return of 7%, in addition to repayment of their loan if the crowdlending project was successful.

### 2.3.1 Differences between Study 1 and Study 2

Although Study 1 and Study 2 have the same procedure, they vary in manipulations and samples across experiments to ensure robust findings that effectively address the research question. This methodological approach enhances the generalizability and reliability of the results. **Table 2-1** shows an overview of the distinction between the studies. Study 1 examined three ventures across various industries (similar to Siebeneicher & Bock, 2022) to understand how crowd investors react to failure. In contrast, Study 2 focused on a single industry but varied the ventures' goals to improve the validity and comparability of investors' reactions (Hornuf & Siemroth, 2023). Additionally, Study 1 participants received a bonus from their employer to invest, whereas Study 2 participants earned funds through a task, enhancing engagement and realistic value perception (e.g., Baumeister et al., 1998;

Loewenstein & Issacharoff, 1994). We also adjusted the gender distribution to a more realistic 70% male and 30% female ratio, reflecting typical crowdfunding demographics (Shneor et al., 2024).

**Table 2-1: Overview distinctions studies 1 and 2**

|                       | Study 1                                                                   | Study 2                                                                                                            |
|-----------------------|---------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|
| Sample                |                                                                           |                                                                                                                    |
| Gender distribution   | 53% male                                                                  | 70% male                                                                                                           |
| Panel provider        | Bilendi & respondi                                                        | Prolific                                                                                                           |
| Study design          |                                                                           |                                                                                                                    |
| Fictional money       | Gifted bonus from employer                                                | A task to earn money                                                                                               |
| Investment amount     | €1,000                                                                    | €3,000                                                                                                             |
| Campaigns (vignettes) | Distinct industries                                                       | Single industry:<br>Finance a briquetting plant to process collected biomass into briquettes for energy production |
| <i>Environmental</i>  | App for reusable takeaway boxes for restaurants                           | Reduce CO2 emissions by approximately 6,000 tons                                                                   |
| <i>Social</i>         | App for integrating refugees into the German labor market                 | Creating around 100 new jobs to reduce Africa's poverty                                                            |
| <i>Commercial</i>     | App for financial advice, providing investors with expertise and coaching | +1% early bird bonus and a +1% preferential interest rate                                                          |

## 2.4 Study 1

### 2.4.1 Sample

To identify the necessary sample size, we used an a-priori power analysis drawing on G\*Power (Faul et al., 2009). We chose a significance level of  $\alpha = 0.05$  and a power level of  $1 - \beta = 0.95$ , which provided a conservative estimate for the required sample size. Following Cohen's (1988) guideline, we selected a medium effect size index of 0.15. The power analysis indicated that we would need at least 153 participants to achieve sufficient statistical power

using linear multiple regression with a fixed model and a single regression coefficient. Based on this power analysis, this study fulfilled the requirement by recruiting 160 participants. We collected our sample from Bilendi & respondi, an ISO 20252:2019 certified panel service provider based in Germany. Our sample consisted of 127 inexperienced crowd investors with general investment experience (i.e., experience with exchange-traded commodities or funds, government bonds, stocks, unit trusts, angels investing, private equity funds, and options (e.g., Butticiè et al., 2022)) and 33 experienced crowd investors. **Table 2-2** summarizes the sample characteristics for all three studies.

#### 2.4.2 Research design

Participants were randomly assigned to one of the three experimental vignettes, each signaling a different value: social ( $n = 50$ ), environmental ( $n = 53$ ), or commercial ( $n = 57$ ). The social signal focused on developing a digital platform to facilitate the integration of refugees into the German labor market (see Appendix A2). The environmental signal centered around a digital platform for renting reusable takeaway boxes in the catering industry (see Appendix A3). The commercial signal aimed to boost revenue by creating a digital platform for financial advice, providing investors with expertise and coaching (see Appendix A4). All vignettes exhibited parallel structure and word count. Based on pre-test feedback, a standardized sentence on the respective venture's high growth potential and profit margins was included for consistency.

Participants were given a fictitious amount of €1,000, framed as an unexpected bonus payment from the employer. Participants were asked to allocate between €0 and €1,000 of their fictitious money to the assigned campaign as their first investment decision. They were told the amount not invested would stay in a bank account without interest. Afterward, all participants received a failure signal of the assigned manipulated campaign. An email from the crowdlending platform *Investia* informed the participants about the investment failure due

to unforeseen problems of the venture and announced that investors lost their initial investment and would not receive any return (see Appendix A5). Subsequently, participants were again given an unexpected bonus payment from the employer with a fictitious amount of €1,000. They were asked about allocating their subsequent investment, between €0 and €1,000, to a campaign similar to the one they were assigned in the prefunding phase.

Table 2-2: Sample characteristics for all studies

|                               | Study 1                                      |                                                 | Study 2                                       |                                                 | Post hoc survey                               |                                                 |
|-------------------------------|----------------------------------------------|-------------------------------------------------|-----------------------------------------------|-------------------------------------------------|-----------------------------------------------|-------------------------------------------------|
|                               | Experienced crowd investors ( <i>n</i> = 33) | Inexperienced crowd investors ( <i>n</i> = 127) | Experienced crowd investors ( <i>n</i> = 108) | Inexperienced crowd investors ( <i>n</i> = 200) | Experienced crowd investors ( <i>n</i> = 101) | Inexperienced crowd investors ( <i>n</i> = 103) |
|                               | Mean (SD) or percentage                      |                                                 | Mean (SD) or percentage                       |                                                 | Mean (SD) or percentage                       |                                                 |
| Personal demographics         |                                              |                                                 |                                               |                                                 |                                               |                                                 |
| Male (%)                      | 54.50                                        | 52.00                                           | 71.30                                         | 68.50                                           | 78.20                                         | 72.80                                           |
| Age (years)                   | 37.06 (11.46)                                | 43.89 (14.05)                                   | 35.06 (7.49)                                  | 34.66 (9.39)                                    | 33.37 (8.92)                                  | 32.87 (9.21)                                    |
| Education (%)                 |                                              |                                                 |                                               |                                                 |                                               |                                                 |
| Apprenticeship                | 27.30                                        | 40.20                                           | 21.30                                         | 24.50                                           | 16.80                                         | 21.30                                           |
| Bachelor                      | 18.20                                        | 18.10                                           | 37.00                                         | 31.50                                           | 37.60                                         | 35.00                                           |
| Master                        | 42.40                                        | 29.90                                           | 34.30                                         | 30.00                                           | 26.70                                         | 29.10                                           |
| Ph.D.                         | 6.10                                         | 2.40                                            | 2.80                                          | 5.00                                            | 6.90                                          | 4.90                                            |
| Investment experience (years) | 6.70 (7.23)                                  | 11.26 (11.18)                                   | 6.48 (6.04)                                   | 5.75 (5.66)                                     | 6.85 (6.57)                                   | 5.16 (4.92)                                     |
| Employment experience (years) | 15.73 (12.83)                                | 20.78 (13.43)                                   | 10.54 (7.76)                                  | 10.07 (8.97)                                    | 9.88 (7.88)                                   | 9.60 (8.62)                                     |
| Income (%)                    |                                              |                                                 |                                               |                                                 |                                               |                                                 |
| Under €3,000                  | 21.30                                        | 39.70                                           | 44.40                                         | 52.00                                           | 37.60                                         | 48.50                                           |
| Above €3,000                  | 75.80                                        | 56.70                                           | 52.80                                         | 42.50                                           | 58.40                                         | 47.60                                           |



### 2.4.3 Measures

**Subsequent investment after investment failure.** We followed previous experimental research that operationalized the invested allocation of the crowd lenders as a success indicator (Kanze et al., 2018; Shneor & Vik, 2020). In the experiment, participants were asked to imagine being in a crowdlending situation where they could invest up to €1,000. A slider was employed as the chosen scale, enabling participants to select an amount within the €0 to €1,000 range. After encountering a failure signal of their initial investment, participants were allowed to invest a new amount of earnings in a campaign (i.e., How much of your €1,000 would you like to invest in start-ups like the one presented before through crowdlending?).

**Crowdfunding experience.** We built a dummy variable to measure whether participants were experienced or inexperienced crowd investors (1 = crowdfunding experience, 0 = no crowdfunding experience).

**Campaign.** We chose the commercial campaign as the reference category to measure the moderation effects of the social and environmental campaign compared to the commercial campaign. Hence, we built dummy variables that reflected our vignettes.

**Control variables.** In our study, we included several control variables identified by previous research as relevant to the decision-making process in crowdlending (e.g., Penz et al., 2022) (see Appendix A11). First, we controlled for sociodemographic characteristics as Tenner and Hörisch (2021) found that attributes such as age, gender, and investment experience are associated with individuals who engage in crowdfunding. Additionally, to enhance the validity of participants' responses, we included a measure of social desirability (Penz et al., 2022), employing the scale by Haghighat (2007). Social desirability is, for example, measured as "Do you always practice what you preach to people?" Finally, recognizing the significant role of risk willingness in crowdfunding decisions (e.g.,

Wasiuzzaman et al., 2021), we included risk-taking (Menkhoff & Sakha, 2016) measured, for instance, as “Are you generally a person who is fully prepared to take risks or do you try to avoid taking risk?”.

#### 2.4.4 Implementation and manipulation checks

We take several steps to minimize the risk of potential biases in the experiment (Podsakoff et al., 2012). First, we conducted a manipulation check after each of the three vignettes to ensure participants' comprehension of the vignettes (Shadish et al., 2003). Participants were asked to select the correct value of the campaign (e.g., for participants who read the environmental vignette: “An environmental value is central to the young venture and its activities”; for participants who read the social vignette: “A social value is central to the young venture and its activities”). An incorrect response resulted in exclusion from the experiment. Second, we included an attention check to improve data quality. This check required participants to select a specific response option (e.g., “For this item, please select ‘strongly disagree’”). All participants passed the attention check successfully and could continue participating in the experiment (Kung et al., 2018). Third, we also implemented a reality check (Maute & Dubés, 1999), which showed that the scenarios were perceived as (all equally) realistic.<sup>1</sup> Fourth, we checked for randomization across the sample. We found no significant differences in the sample characteristics between the vignettes and crowd investors' crowdfunding experience (Appendix A6).

---

<sup>1</sup> We measured the realism of the experiments and manipulation (Maute & Dubés, 1999) with three items (“How realistic was the described situation?”; anchors ranging from 1 [*not realistic at all*] to 7 [*very realistic*];  $M = 5.16$ ; “How well were you able to put yourself into the described situation?”; anchors ranging from 1 [*very poor*] to 7 [*very well*];  $M = 5.43$ ; “Hands on your heart, how carefully did you read the scenario?”; scale between 1 [*not very carefully*] to 7 [*very carefully*];  $M = 6.18$ ). The analysis of variance (ANOVA) between the realism items and our vignettes show no statistical significant difference,  $F(2,157) = 0.38, p = .69$ .

### 2.4.5 Analytical procedure

We employed an ordinary least squares (OLS) regression to analyze the impact of the crowdfunding experience on investment decisions after a failure while controlling for initial investment behavior by including the initial investment. This approach allowed us to accurately isolate the effect of the crowdfunding experience on subsequent investment decisions, providing robust insights into behavioral changes over time. As we further want to understand how different campaigns influence their reactions to failure, we employed a moderation analysis conducting OLS. Robust standard errors were evaluated to address potential heteroscedasticity concerns, and the variance inflation factor (VIF) was examined to detect any possible multicollinearity issues. It is worth noting that all VIF values remained well below the recommended threshold values (i.e.,  $< 5$ ; Cohen et al., 2002), ensuring the absence of significant multicollinearity. In addition, we performed several procedures to enhance the clarity of randomizations and avoid potential bias commonly caused by social desirability, willingness to take risks, investment experience years, age, and gender (Podsakoff et al., 2012). Overall, no significant effects of these influential factors were observed in our analysis.

### 2.4.6 Results

**Table 2-3** shows the descriptive statistics, including our variables' means, standard deviations, and correlations.

Overall, the subsequent investments made after a failure were significantly lower than the initial investments across all participants ( $M = -141.56$ ,  $SD = 199.70$ ),  $t(159) = -8.96$ ,  $p < .001$ . However, we ran an OLS and a moderation analysis using OLS to examine our H1 and H2, which investigated whether prior crowdfunding or no prior crowdfunding experience leads to different reactions to failure signals. The results revealed that prior crowdfunding experience significantly influences how crowd investors react to investment failure ( $b =$

67.63,  $p = .06$ ). Hence, experienced crowd investors invest significantly more money after encountering failure than inexperienced crowd investors. Thus, H1 can be supported.

**Table 2-3: Means, standard deviations, and correlations (Study 1)**

|                                                   | <i>M</i> | <i>SD</i> | 1.    | 2.   | 3.    | 4.    | 5.    | 6.     | 7.   |
|---------------------------------------------------|----------|-----------|-------|------|-------|-------|-------|--------|------|
| 1. Initial investment allocation                  | 375.31   | 241.78    |       |      |       |       |       |        |      |
| 2. Subsequent investment after investment failure | 233.75   | 220.74    | .63** |      |       |       |       |        |      |
| 3. Crowdfunding experience                        | .21      | .41       | .13   | .19* |       |       |       |        |      |
| 4. Investment experience years                    | 10.32    | 10.63     | -.04  | .00  | -.17* |       |       |        |      |
| 5. Gender crowd investor                          | 1.53     | .50       | .04   | .13  | .02   | .24** |       |        |      |
| 6. Age crowd investor                             | 42.48    | 13.80     | -.07  | .03  | -.20* | .58** | .14   |        |      |
| 7. Social desirability                            | 1.35     | .24       | -.09  | -.03 | -.11  | -.15  | .02   | .10    |      |
| 8. Willingness to take risks                      | 3.61     | 1.40      | .14   | .12  | .29** | -.05  | .30** | -.26** | -.05 |

*Note.*  $N = 160$ ; Gender: female = 1, male = 2, investment experience in years, social desirability: yes = 1, no = 2.

\*\*  $p < 0.01$

\*  $p < 0.05$

Furthermore, we examined H2a and H2b, investigating whether the interaction between the crowdfunding experience and the sustainable campaigns predicts subsequent investment after failure. **Table 2-4** shows the results of the moderation analysis, and **Figure 2-1** visualizes the mean values of the experienced and inexperienced crowd investors in t1 and t2 across the three campaigns. The results indicated that an environmental campaign significantly moderated the effect between the crowdfunding experience and subsequent investment after failure ( $b = -144.35, p = .08$ ). However, no significant moderation was found between a social campaign, the crowdfunding experience, and subsequent investment after failure signal ( $b = -88.45, p = .30$ ). Thus, we find support for H2a and reject H2b.

#### 2.4.7 Conclusion Study 1

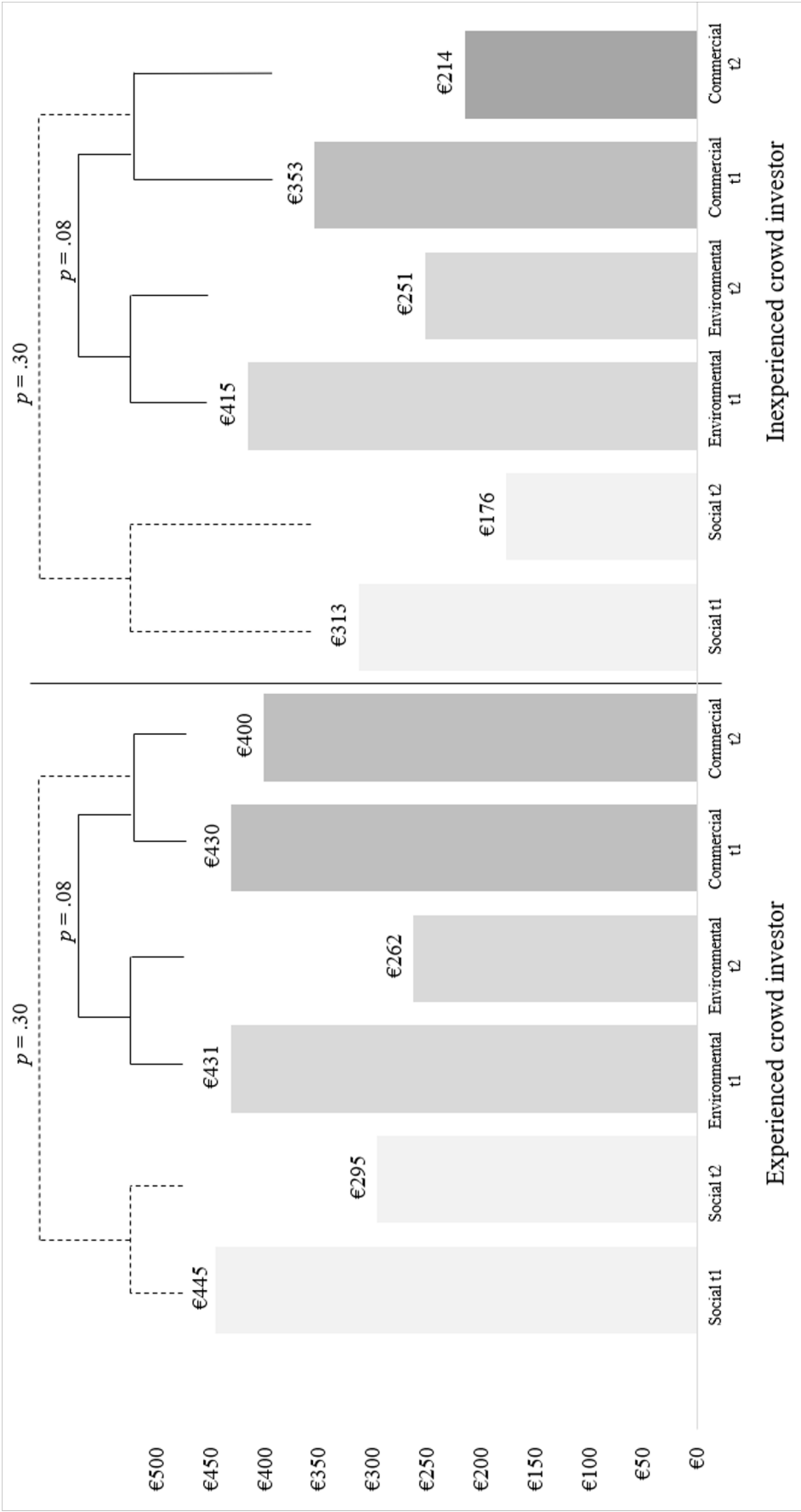
Our study found that different investor types react differently to failure signals and failure signals in environmental campaigns. Specifically, experienced crowd investors tend to invest significantly more after encountering failure signals than inexperienced crowd investors. This indicates that experienced crowd investors are generally more forgiving after failure and maintain a positive outlook for future investments. We observe a reversed trend when examining the joint effects of failure signals following environmental signals. Experienced crowd investors significantly reduce their investments in environmental campaigns after experiencing a failure compared to their investments in commercial campaigns, compared to inexperienced ones. These findings underscore the importance of differentiating between investor types within crowdfunding, as they process signals differently and exhibit varied investment behaviors in response to these signals.

**Table 2-4: Regression coefficients, standard errors, and model summary after failure (Study 1)**

| Variable                             | DV = Subsequent investment after investment failure |           |         |          |          |           |         |          |          |           |         |          |
|--------------------------------------|-----------------------------------------------------|-----------|---------|----------|----------|-----------|---------|----------|----------|-----------|---------|----------|
|                                      | Model 1                                             |           |         |          | Model 2  |           |         |          | Model 3  |           |         |          |
|                                      | <i>b</i>                                            | <i>SE</i> | $\beta$ | <i>p</i> | <i>b</i> | <i>SE</i> | $\beta$ | <i>p</i> | <i>b</i> | <i>SE</i> | $\beta$ | <i>p</i> |
| Controls                             |                                                     |           |         |          |          |           |         |          |          |           |         |          |
| <i>Initial investment allocation</i> | .57                                                 | (.06)     | .62     | <.001    | .57      | (.06)     | .62     | <.001    | .56      | (.06)     | .62     | <.001    |
| <i>Gender</i>                        | 45.44                                               | (29.57)   | .10     | .13      | 42.04    | (30.07)   | .10     | .16      | 39.43    | (29.99)   | .09     | .19      |
| <i>Age</i>                           | 1.61                                                | (1.30)    | .10     | .22      | 1.71     | (1.31)    | .11     | .19      | 1.88     | (1.31)    | .12     | .15      |
| <i>Investment experience years</i>   | -.74                                                | (1.67)    | -.04    | .66      | -.65     | (1.68)    | -.03    | .70      | -.86     | (1.68)    | -.04    | .61      |
| <i>Social desirability</i>           | 24.79                                               | (58.22)   | .03     | .67      | 28.69    | (58.89)   | .03     | .63      | 24.24    | (58.80)   | .03     | .68      |
| <i>Willingness to take risks</i>     | -1.33                                               | (11.16)   | -.01    | .91      | .21      | (11.30)   | .00     | .99      | .61      | (11.31)   | .00     | .95      |
| Main effects                         |                                                     |           |         |          |          |           |         |          |          |           |         |          |
| <i>Crowdfunding experience</i>       | 67.63                                               | (35.75)   | .12     | .06      | 69.24    | (36.02)   | .13     | .06      | 150.38   | (61.06)   | .28     | .01      |
| <i>Environmental</i>                 |                                                     |           |         |          | -27.48   | (33.85)   | -.06    | .42      | 2.10     | (37.67)   | .00     | .95      |
| <i>Social</i>                        |                                                     |           |         |          | -31.57   | (33.49)   | -.07    | .35      | -16.07   | (37.17)   | -.03    | .67      |
| Interaction Terms                    |                                                     |           |         |          |          |           |         |          |          |           |         |          |
| <i>Environmental x</i>               |                                                     |           |         |          |          |           |         |          | -144.35  | (81.02)   | -.18    | .08      |
| <i>Crowdfunding experience</i>       |                                                     |           |         |          |          |           |         |          |          |           |         |          |
| <i>Social x</i>                      |                                                     |           |         |          |          |           |         |          | -88.45   | (85.12)   | -.10    | .30      |
| <i>Crowdfunding experience</i>       |                                                     |           |         |          |          |           |         |          |          |           |         |          |
| Constant                             | -151.53                                             |           |         | .14      | -143.47  |           |         | .17      | -153.09  |           |         | .14      |
| <i>R</i> <sup>2</sup>                |                                                     | .40       |         |          |          | .39       |         |          |          | .40       |         |          |

Note. *N* = 160; *b* = unstandardized effect, *SE* = standard error,  $\beta$  = standardized effect, DV = dependent variable; Reference category is inexperienced crowd investor = 0 and commercial campaign = 0, Social = social campaign, Environmental = environmental campaign, Gender: female = 1, male = 2.

Figure 2-1: Mean of investment before and after failure signals depending on crowdfunding experience (Study 1)



Note. Experienced crowd investor  $n = 33$ , social  $n = 10$ , environmental  $n = 13$ , commercial  $n = 10$ ; Inexperienced crowd investor  $n = 127$ , social  $n = 40$ , environmental  $n = 40$ , commercial  $n = 47$ ; t1 = initial investment, t2 = subsequent investment after encountering failure  
dashed comparisons are non-significant

## **2.5 Study 2**

### **2.5.1 Sample**

To test the robustness of our findings from Study 1, we conducted Study 2, where we revised sample characteristics and adjusted the vignettes. In Study 2, we ensured a more balanced sample by increasing the number of participants with crowdfunding experience and adjusting the ratio to better reflect the actual distribution in the investment community (70% male, 30% female, as typical in crowdfunding and investment sectors, e.g., Shneor et al., 2024). Additionally, to make our results more comparable, we used the existing vignettes of Hornuf and Siemroth (2023) representing a single industry, varying only in the signals they emitted: social, environmental, or commercial.

Similar to Study 1, we recruited participants experienced in crowdfunding and participants without crowdfunding experience but with general investment experience (i.e., experience with exchange-traded commodities or funds, government bonds, stocks, unit trusts, angel investing, private equity funds, and options (e.g., Buttice et al., 2022)). Our final sample consists of 308 participants recruited via the incentivized platform Prolific. The sample is subdivided into 108 experienced and 200 inexperienced crowd investors. Descriptive information of the two subsamples is reported in **Table 2-2**.

### **2.5.2 Research design**

We mirrored the research design guiding Study 1 with minor changes to improve the robustness of our results in different cases. The experiment began with a uniform introduction provided to all participants, presenting the concept of crowdlending and prompting them to envision themselves on a return-oriented crowdlending platform (see Appendix A1). Alongside general information, participants were informed about the potential occurrence of investment failure, which could lead to a partial or total loss of their investment.



To model the prefunding phase, participants engaged in an unrelated task before making the initial investment decisions, allowing them to earn the funds necessary for the allocation. This task-connected approach enhances engagement and realistic value perception (e.g., Baumeister et al., 1998), rendering earned money more tangible than simply receiving it as a gift or unexpected bonus (Loewenstein & Issacharoff, 1994). The task involved counting the number of “i” letters in a presented definition of crowdlending to promote recall. Participants whose responses deviated no more than 20% from the correct response proceeded, and all those with higher deviations were excluded. Upon successfully completing the task, participants were informed that they would receive €3,000 as a reward for their performance, which they could subsequently invest. We decided to adjust the award from €1,000 to a generous amount—€3,000—to provide them with adequate funding possibilities, as investments above €1,000 are also common in crowdlending.<sup>2</sup> Providing participants with up to €3,000 reflects the realistic investment behaviors of crowd investors, offering them a plausible range of freedom for their investment decisions. As evidenced by the average investments in our study (initial investment:  $M = 1,067.14$ ,  $SD = 849.00$ ; investment after failure:  $M = 627.18$ ,  $SD = 725.18$ ), the amount aligns well with real life investment patterns, making the €3,000 limit practical and representative. We first started the experiment by collecting demographic information and introducing crowdlending. Then, we asked participants to imagine they were on a crowdlending platform and found one project they were interested in.

---

<sup>2</sup> Based on a search on various crowdlending platforms (Lande.com or Crowdestor.com) we identified an average investors portfolio of around €3,500. We also conducted an analysis to determine the mean investment per campaign within a subset of 15 campaigns that were randomly extracted from the historical records of the *bettervest.com* platform spanning recent years. The calculation methodology involved the division of the cumulative investment amount by the corresponding count of investors participating in each individual campaign. The resultant average investment per project was €1,173. Accordingly, we have set an upper limit of €3,000 to give participants sufficient realistic flexibility.

Afterward, participants were randomly assigned to one of the three experimental vignettes, each signaling a different focus: social ( $n = 104$ ), environmental ( $n = 103$ ), or commercial ( $n = 101$ ). Although all three vignettes were based on the same venture (i.e., the same industry), each sent a different signal. We modified the vignettes from Hornuf and Siemroth's (2023) field experiment study based on the *bettervest.com* crowdlending platform and prior campaigns. The specific venture described in all three signaling conditions focuses on *Sana*, which aims to finance a briquetting plant to process collected biomass into briquettes for energy production (see Appendix A7-A9).

To emphasize environmental and social signals, we removed most financial and economic information, except for the promised 7% return on investment over the four-year project period. The environmental signal highlighted that the project could reduce CO<sub>2</sub> emissions by approximately 6,000 tons and address five UN Sustainable Development Goals (SDGs). For the social signal, we added that the project would create around 100 new jobs, reduce Africa's poverty, and approach five UN SDGs. Additionally, for the commercial signal, we included information about a +1% early bird bonus and a +1% preferential interest rate (see Appendices G- J for details).

In the first investment scenario, participants were asked to designate their self-earned fictitious investment allocation between €0 and €3,000 to the assigned campaign as their first investment decision. Afterward, all participants received a failure signal of the assigned manipulated campaign. An email from the crowdlending platform informed the participants about the investment failure due to unforeseen problems of the venture. It announced that the funders lost their initial investment and would not receive any return (see Appendix A5). Subsequently, participants were again given the task of counting the number of "a" letters in the crowdlending definition to earn money, which they could use to make a subsequent

investment after failure. They were to allocate their subsequent investment, between €0 and €3,000, to a campaign similar to the one they were assigned in the prefunding phase.

### 2.5.3 Measures

To ensure robustness and comparability with our previous findings, we used the same measures in Study 2 as those employed in Study 1 (see Study 1 measures and Appendix A11 for details). This consistent methodology allows us to directly compare the results across studies, enhancing the reliability of our conclusions. By maintaining the same measures, we can accurately assess whether individuals with crowdfunding experience respond differently to failures than those without such experience and evaluate the impact of sustainable campaigns in a more controlled and balanced sample. This methodological rigor helps to validate our findings and provides a solid foundation for our research conclusions.

We have also undertaken the same great efforts to ensure that Study 2 is designed to minimize the risk of potential biases (Podsakoff et al., 2012; see Study 1 *4.4 Implementation and Manipulation Checks*). Specifically, we implemented a manipulation check after each of the three vignettes to ensure participants' comprehension of the vignettes (Shadish et al., 2003). We also included an attention check to improve data quality. This check required participants to select a specific response option (e.g., "For this item, please select 'strongly disagree'"). Every participant successfully passed this check. Moreover, we also implemented a reality check (Maute & Dubés, 1999), which showed that the scenarios were perceived as (all equally) realistic.<sup>3</sup> Lastly, we conducted a randomization check across the sample for our

---

<sup>3</sup> We measured the realism similar to Study 1 ("How realistic was the described situation?"; anchors ranging from 1 [*not realistic at all*] to 7 [*very realistic*];  $M = 5.15$ ; "How well were you able to put yourself into the described situation?"; anchors ranging from 1 [*very poor*] to 7 [*very well*];  $M = 5.69$ ; "Hands on your heart, how carefully did you read the scenario?"; scale between 1 [*not very carefully*] to 7 [*very carefully*];  $M = 6.33$ ). This implies that our participants indeed confirmed that (1) the described situation was realistic and (2) they were well able to put themselves into the described situation. The ANOVA between the realism items and our vignettes show no statistical significant difference,  $F(2,1305) = 0.77, p = .46$ .

three vignettes. We found no significant differences in the sample characteristics between the vignettes (see Appendix A10).

### 2.5.4 Results

The statistical analysis mirrored that of Study 1. Robust standard errors were evaluated to address potential heteroscedasticity concerns, and the VIF was examined to detect any possible multicollinearity issues. As in Study 1, all VIF values remained well below the recommended threshold values (i.e.,  $< 5$ ; Cohen et al., 2002), indicating the absence of significant multicollinearity. In addition, we performed several procedures to enhance the clarity of randomizations and avoid potential bias commonly caused by social desirability, willingness to take risks, investment experience years, age, and gender (Podsakoff et al., 2012). Overall, no significant effects of these influential factors were observed in our analysis.

**Table 2-5** reports the descriptive statistics, including our variables' means, standard deviations, and correlations.

Similar to Study 1, the subsequent investments made after a failure were significantly lower than the initial investments across all participants ( $M = -439.97$ ,  $SD = 643.52$ ),  $t(307) = -12.00$ ,  $p < .001$ . To examine our H1 and H2, which investigated whether prior crowdfunding or no prior crowdfunding experience leads to different reactions to failure signals, we ran an OLS and a moderation analysis using OLS. The results revealed that prior crowdfunding experience significantly influences how crowd investors react to investment failure ( $b = 143.31$ ,  $p = .03$ ). Hence, experienced crowd investors allocate significantly more money after encountering failure than inexperienced crowd investors. Thus, H1 can be supported.

*Table 2-5: Means, standard deviations, and correlations (Study 2)*

|                                                   | <i>M</i> | <i>SD</i> | 1.    | 2.   | 3.  | 4.    | 5.    | 6.   | 7.    |
|---------------------------------------------------|----------|-----------|-------|------|-----|-------|-------|------|-------|
| 1. Initial investment allocation                  | 1067.14  | 849.00    |       |      |     |       |       |      |       |
| 2. Subsequent investment after investment failure | 627.18   | 725.27    | .68** |      |     |       |       |      |       |
| 3. Crowdfunding experience                        | .35      | .48       | -.08  | .04  |     |       |       |      |       |
| 4. Investment experience years                    | 6.01     | 5.80      | .07   | .06  | .06 |       |       |      |       |
| 5. Gender crowd investor                          | 1.69     | .46       | -.14* | -.11 | .03 | .13*  |       |      |       |
| 6. Age crowd investor                             | 34.80    | 8.76      | .10   | .02  | .02 | .54** | .02   |      |       |
| 7. Social desirability                            | 1.46     | .29       | .00   | .04  | .00 | .01   | -.04  | -.03 |       |
| 8. Willingness to take risks                      | 4.14     | 1.22      | .05   | .00  | .08 | .03   | .26** | -.05 | -.12* |

*Note.*  $N = 308$ ; Gender: female = 1, male = 2, investment experience in years, social desirability: yes = 1, no = 2.

\*\*  $p < 0.01$

\*  $p < 0.05$

Furthermore, we examined H2a and H2b, which investigated whether the interaction between the crowdfunding experience and the sustainable campaigns predicts subsequent investment after failure. **Table 2-6** presents the findings of the moderation analysis, and **Figure 2-2** visualizes the effects. The results indicated that an environmental campaign significantly moderated the effect between the crowdfunding experience and subsequent investment after failure ( $b = -548.60, p < .001$ ). However, no significant moderation was found between a social campaign, the crowdfunding experience, and subsequent investment after the failure signal ( $b = -244.53, p = .12$ ). Thus, we find support for H2a and reject H2b.

### 2.5.5 Conclusion Study 2

In this second study, we observed similar effects to those found in Study 1. Our findings reveal that different types of investors process failure signals and the combination of failure and environmental signals in distinct ways. Notably, experienced crowd investors are inclined to invest significantly more after encountering failure signals than inexperienced crowd investors. This suggests that experienced crowd investors generally exhibit a higher tolerance for failure and a more optimistic outlook for future investments.

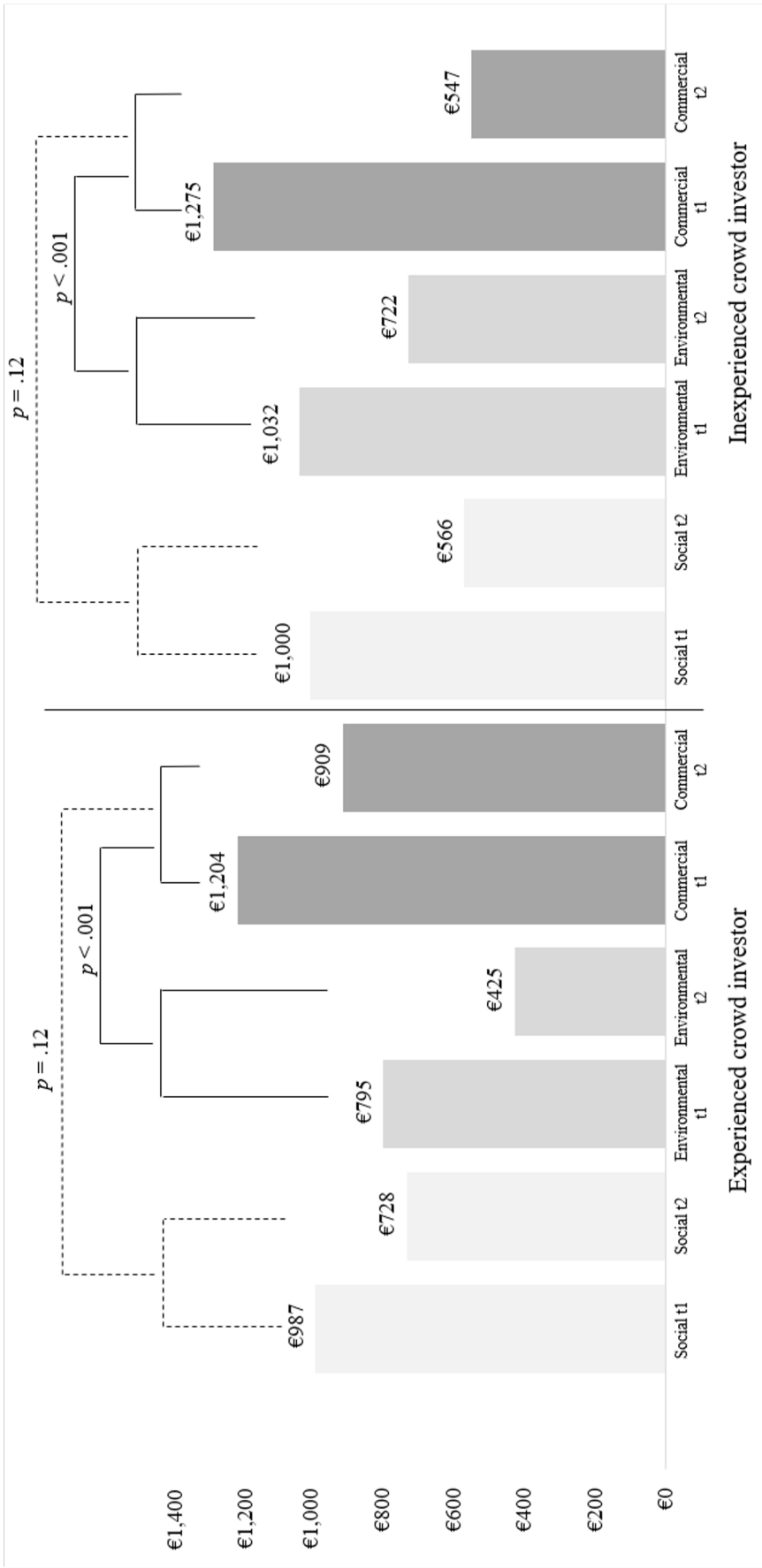
When analyzing the impact of a failure signal following an environmental signal, we identified divergent investment behaviors between experienced and inexperienced crowd investors. After a failure, experienced crowd investors tend to substantially decrease their investments in environmental campaigns, whereas they maintain higher investment levels in commercial campaigns. In contrast, inexperienced crowd investors demonstrate increased investment in environmental campaigns after failure.

**Table 2-6: Regression coefficients, standard errors, and model summary after failure (Study 2)**

| Variable                             | DV = Subsequent investment after investment failure |           |         |          |          |           |         |          |          |           |         |          |
|--------------------------------------|-----------------------------------------------------|-----------|---------|----------|----------|-----------|---------|----------|----------|-----------|---------|----------|
|                                      | Model 1                                             |           |         |          | Model 2  |           |         |          | Model 3  |           |         |          |
|                                      | <i>b</i>                                            | <i>SE</i> | $\beta$ | <i>p</i> | <i>b</i> | <i>SE</i> | $\beta$ | <i>p</i> | <i>b</i> | <i>SE</i> | $\beta$ | <i>p</i> |
| Controls                             |                                                     |           |         |          |          |           |         |          |          |           |         |          |
| <i>Initial investment allocation</i> | .59                                                 | (.04)     | .68     | <.001    | .60      | (.04)     | .70     | <.001    | .59      | (.04)     | .70     | <.001    |
| <i>Gender</i>                        | -4.04                                               | (70.03)   | .00     | .95      | -5.01    | (69.90)   | .00     | .94      | 10.12    | (68.85)   | .01     | .88      |
| <i>Age</i>                           | -5.97                                               | (4.17)    | -.07    | .15      | -6.09    | (4.17)    | -.07    | .15      | -5.28    | (4.10)    | -.06    | .20      |
| <i>Investment experience years</i>   | 6.05                                                | (6.34)    | .05     | .34      | 6.20     | (6.33)    | .05     | .33      | 6.66     | (6.23)    | .05     | .29      |
| <i>Social desirability</i>           | 78.73                                               | (104.55)  | .03     | .45      | 75.39    | (104.95)  | .03     | .47      | 84.61    | (103.25)  | .03     | .41      |
| <i>Willingness to take risks</i>     | -25.65                                              | (26.30)   | -.04    | .33      | -26.27   | (26.26)   | -.04    | .32      | -29.16   | (25.85)   | -.05    | .26      |
| Main effects                         |                                                     |           |         |          |          |           |         |          |          |           |         |          |
| <i>Crowdfunding experience</i>       | 143.31                                              | (64.22)   | .09     | .03      | 135.80   | (64.28)   | .09     | .04      | 412.89   | (114.59)  | .27     | <.001    |
| <i>Environmental</i>                 |                                                     |           |         |          | 116.00   | (75.58)   | .08     | .13      | 304.01   | (91.58)   | .20     | <.001    |
| <i>Social</i>                        |                                                     |           |         |          | 115.39   | (75.20)   | .08     | .13      | 183.42   | (89.70)   | .12     | .04      |
| Interaction Terms                    |                                                     |           |         |          |          |           |         |          |          |           |         |          |
| <i>Environmental x</i>               |                                                     |           |         |          |          |           |         |          | -548.60  | (156.16)  | -.26    | <.001    |
| <i>Crowdfunding experience</i>       |                                                     |           |         |          |          |           |         |          |          |           |         |          |
| <i>Social x</i>                      |                                                     |           |         |          |          |           |         |          | -244.53  | (156.85)  | -.11    | .12      |
| <i>Crowdfunding experience</i>       |                                                     |           |         |          |          |           |         |          |          |           |         |          |
| Constant                             | 118.10                                              |           |         | .66      | 45.12    |           |         | .86      | -87.37   |           |         | .74      |
| <i>R</i> <sup>2</sup>                |                                                     | .46       |         |          |          | .46       |         |          |          | .48       |         |          |

Note. *N* = 308; *b* = unstandardized effect, *SE* = standard error,  $\beta$  = standardized effect, DV = dependent variable, Reference category is inexperienced crowd investor = 0 and commercial campaign = 0, Social = social campaign, Environmental = environmental campaign, Gender: female = 1, male = 2.

Figure 2-2: Mean of investment before and after failure signals depending on crowdfunding experience (Study 2)



Note. Experienced crowd investor  $n = 108$ , social  $n = 37$ , environmental  $n = 41$ , commercial  $n = 30$ , Inexperienced crowd investor  $n = 200$ , social  $n = 67$ , environmental  $n = 62$ , commercial  $n = 72$ ; t1 = initial investment, t2 = subsequent investment after encountering failure dashed comparisons are non-significant



## **2.6 Post hoc survey**

Our two experimental studies demonstrated that prior experience shapes how failure signals are interpreted and influences behavior accordingly. This variation suggests that different types of crowd investors exhibit distinct behavioral patterns. To further understand the psychological underpinnings of these differences, particularly the specific traits of these investor types, we conducted a third study—a survey focusing on personal values (e.g., Tenner & Hörisch, 2021). This aspect is critical as previous research highlights the significance of personal characteristics such as motivation and values in interpreting signals (e.g., Bafera & Kleinert, 2023). The third study is essential to deepen our understanding of these influences and to elucidate how they may contribute to the varied responses observed in crowdlending contexts.

### **2.6.1 Sample**

To measure differences in characteristics, such as personal values between experienced and inexperienced crowd investors, we surveyed a sample of 204 participants (who had not participated in the previous study) via Prolific. The sample included 101 participants with crowdfunding experience and 103 without crowdfunding experience but with nonprofessional investment experience (e.g., stocks). Descriptive sample characteristics are reported in **Table 2-2**.

### **2.6.2 Measures**

We used the Portrait Values Questionnaire (PVQ) to capture personal values, focusing on self-transcendence (universalism (biospheric) and benevolence) and self-enhancement (power and achievement) values following prior studies in the crowdfunding context (Dinh & Wehner, 2022; Tenner & Hörisch, 2021). The PVQ is based on Schwartz's basic human value theory (Schwartz, 2003). The Portrait Value Questionnaire employed concise descriptions of fictional individuals to capture participants' personal values implicitly. Subsequently,

participants were asked to rate the extent to which the described person resembled themselves on a Likert scale ranging from 1 (*not resembling me at all*) to 7 (*strongly resembling me*). Cronbach's alphas for self-transcendence and self-enhancement values were .73 and .77, respectively.

### 2.6.3 Results

A one-way analysis of variance (ANOVA) revealed significant differences in self-transcendence values between experienced ( $M = 5.57$ ,  $SD = 0.80$ ) and inexperienced crowd investors ( $M = 5.32$ ,  $SD = 0.93$ ),  $F(1,202) = 3.98$ ,  $p = .04$ . A further ANOVA regarding the subcategory of biospheric value within the self-transcendence values shows a significant difference between experienced ( $M = 5.70$ ,  $SD = 1.20$ ) and inexperienced crowd investors ( $M = 5.11$ ,  $SD = 1.32$ ),  $F(1,202) = 11.34$ ,  $p < .001$ . No significant difference was found for self-enhancement values between experienced ( $M = 4.26$ ,  $SD = 1.28$ ) and inexperienced crowd investors ( $M = 4.30$ ,  $SD = 1.20$ ),  $F(1,202) = 0.04$ ,  $p = .83$ .

## 2.7 Overall discussion

This article aimed to explore how failure signals affect investment behavior among different crowd investors and shed light on the context of sustainable campaigns. In particular, our findings deepen our understanding of how prior funding experience changes the effect of negative signals on crowd investors and may explain why investors show diverge in their future investment behavior (Huang et al., 2022; Roccapiore et al., 2021; Rossi et al., 2023). As hypothesized, both studies revealed that experienced crowd investors react differently to a failure signal than inexperienced crowd investors. First, experienced crowd investors invest significantly more after encountering failure signals than inexperienced crowd investors. Second, we found that experienced crowd investors, compared to inexperienced crowd investors, react more negatively to the failure of environmental compared to commercial campaigns. We do not find a significant effect in comparison to a

social campaign. Thus, for environmental campaigns, crowd investors' experience seems to reverse their reaction to failure compared to inexperienced crowd investors. Furthermore, our post hoc analyses show that experienced crowd investors significantly differ in their personal values, which may provide a tentative explanation for distinct reactions compared to inexperienced investors. These results allow us to derive several theoretical and practical implications.

### **2.7.1 Theoretical implications**

First, our research contributes to the growing literature that examines the different failure perspectives in entrepreneurial finance (e.g., Dorfleitner et al., 2023; Huang et al., 2022; Kgoroadira et al., 2019; Roccapriore et al., 2021) by adding a perspective concerning the impact of investment failure on investors' decisions. Elucidating the impact of investment failure on investors' decisions is our contribution to the recent, growing literature examining the different failure perspectives, for instance, crowdfunding platforms' reactions (Kleinert et al., 2022), entrepreneurs' coping mechanisms (Gottschalk & Mueller, 2022; Piening et al., 2021; Rossi et al., 2023), and venture capital, early-stage or crowd investors' reactions to prior entrepreneurial failures (Huang et al., 2022; Roccapriore et al., 2021; Souakri et al., 2023). We explore the post-funding phase, specifically how crowd investors respond to failure signals after successfully funded campaigns.

Our research reveals that a failure signal determines future investors' decision making. This finding is of particular importance given the recurring involvement of investors and entrepreneurs in the crowdfunding landscape (Andersen et al., 2019; Lee & Chiravuri, 2019), underscoring the role of previous experience in influencing future investment decisions and, consequently, in securing funding for entrepreneurial ventures. Contrasting with studies that found a positive valuation of past entrepreneurial failures among crowd investors (Huang et al., 2022) or venture capital investors (Souakri et al., 2023), our research identifies a

negative impact: crowd investors tend to decrease their future investments following investment losses. While prior studies highlighted that previous failures could enhance an entrepreneur's appeal by demonstrating resilience and learning (e.g., Souakri et al., 2023; Zunino et al., 2022), our findings indicate a different reaction to investment failure. This discrepancy underscores the importance of distinguishing between two distinct failure perspectives: prior entrepreneurial and investment failures. The former refers to an entrepreneur's past unsuccessful ventures (e.g., Czakon et al., 2024), which might be seen positively as valuable learning experiences contributing to an entrepreneur's growth and capability. In contrast, investment failure involves financial losses incurred by crowd investors, typically leading to increased caution and risk aversion (Dorfleitner et al., 2023; Roccapiore et al., 2021). These contrasting perceptions necessitate a nuanced understanding of how different types of failure signals are viewed by crowd investors, as each type can influence future funding decisions in unique ways.

Second, we contribute to the crowdfunding debate by offering a granular differentiation between differing types of crowd investors rather than considering them as a homogenous group (Bapna & Ganco, 2021; Battisti et al., 2024). This adds to previous work that considers crowd investors uniform (e.g., Davis et al., 2017; Dinh & Wehner, 2022). Hence, we addressed the research call by Cummings et al. (2020) and Mochkabadi & Volkmann (2020) to investigate the behavior of different crowd investors. In equity crowdfunding, recent research has started investigating investor types, such as professional, angel-like investors or family and friends within crowdfunding and their behavior, mainly regarding successful campaigns (e.g., Bapna & Ganco, 2021; Battisti et al., 2024; Hornuf et al., 2020; Olsson, 2020).

In a broader sense and originating from the management field (Hambrick & Mason, 1984), our findings relate to March and Simon's (1958) notion about the cognitive processes

of decision makers. Decision makers are endowed with a cognitive base that filters and evaluates external stimuli (e.g., signals). The cognitive base includes previous knowledge (i.e., experience), which allows for assumptions about future events, alternatives, and the consequences of these alternatives. Transferred to the crowdfunding context, experienced crowd investors might filter and evaluate failure signals based on their knowledge of previous (un)successful crowd investments, leading to a more nuanced understanding of their investments' risks and future gains. In general, our results indicate that young ventures could benefit from experienced crowd investors because they seem to accept failure as part of the process and are more likely to invest in young ventures even if they experienced an investment failure before. Their experience might imply that some new ventures will fail, but others will thrive, so experienced crowd investors might have learned from past investments that at some point, the investment will just fail, but there will also be gains with other investments. Thus, crowd investors' experience might buffer the negative signal of failure and might not be viewed as a downside.

Third, we uncover a reversed effect in the sustainability context, as experienced crowd investors respond more negatively to environmental than commercial failures. While previous studies in the sustainable entrepreneurship literature underlined the positive effects of sustainable signals on funders' perceptions and crowdfunding success (Allison et al., 2015; Nielsen & Binder, 2021; Wehnert et al., 2019), our study introduces a contrasting perspective by highlighting that environmental signals in a failure context can produce adverse effects on crowd investors' behavior. The variations among experienced crowd investors' behavior seem surprising as experienced crowd investors are typically aware that failure is an inherent aspect of the process, particularly in crowdlending (Vanacker et al., 2019).

However, experienced crowd investors perceive failure in commercial campaigns as a natural and constructive part of the entrepreneurial journey and their investment portfolio. In

contrast, they view failure in environmental campaigns more negatively. Their heightened adverse reaction to environmental and failure signals suggests a more profound concern for the environment, as reflected in their higher biospheric values and a greater emotional involvement (e.g., Conte, Brosch, et al., 2023). Hence, when negative sustainable signals, like failing to achieve sustainable impact, occur, individuals with strong self-transcendence and biospheric values, such as experienced crowd investors, react more negatively due to perceiving these failures as threats to their core environmental beliefs (e.g., Conte, Brosch, et al., 2023). Through the emotional attachment to their investments in sustainable campaigns (Moysidou & Spaeth, 2016), experienced crowd investors may perceive losses of environmental campaigns as more substantial, especially when they occur across multiple fronts—financial return on investment and sustainable value. Hornuf et al. (2021) identified similar patterns, noting that crowd investors in equity crowdfunding are more sensitive to failures in environmental campaigns, tending to penalize these campaigns more harshly by reducing future funding. Experienced crowd investors' reactions may also be intensified by the opaque nature of crowdlending platforms, which can obscure specific details about the progress and realization of environmental benefits in sustainable projects (Hörisch, 2019). This lack of transparency may heighten their emotional responses, significantly affecting their future investment decisions. Concerning social campaigns, crowd investors did not show significantly different reactions. This implies that environmental and social campaigns may provoke different reactions, necessitating a precise differentiation between social and environmental campaigns (e.g., Siebeneicher & Bock, 2022).

Moreover, our study refines signaling theory in sustainable entrepreneurship (e.g., Allison et al., 2015; Buttice et al., 2017; Calic & Mosakowski, 2016; Nielsen & Binder, 2021) by highlighting how experienced and inexperienced crowd investors interpret conflicting environmental and failure signals differently. Our study results diverge from previous

research. For instance, Wehnert et al. (2019) observed positive complementary effects of signals related to prior crowdfunding success and environmental factors on funders' perceptions. Similarly, Allison et al. (2015) and Nielsen and Binder (2021) reported that environmental signals alone positively influence crowdfunding success. In contrast, our findings revealed that environmental signals have negative combined effects when paired with failure signals, altering the investment behavior of experienced crowd investors. Hence, we demonstrate that signals are not interpreted in isolation but in combination, where one signal conflicts (e.g., failure signals) with another (e.g., environmental signals) can significantly reshape the perception of another. Hence, we demonstrate how conflicting signals can have negative effects. This finding contrasts with prior research, such as Huang et al. (2022), which suggests that conflicting signals, like combining failure and success experiences, can be beneficial by signaling opportunities for learning and credibility. By integrating crowd investors' characteristics, particularly their experience level, we show that various individuals interpret conflicting signals differently, leading to diverse behavioral outcomes. This underscores the complex interplay between different conflicting signals, suggesting that the interpretation of those signals is not fixed but contingent on their combination and the investors' characteristics.

### **2.7.2 Practical implications**

Our study offers insights into the behavior of different types of crowd investors after encountering failure signals, providing practical implications for entrepreneurs and crowdlending platforms. Understanding the distinct behavior of different investor types is crucial in managing expectations and building a supportive community around their ventures (Vogeley et al., 2023). Entrepreneurs should recognize that investors on crowdlending platforms process signals differently based on their distinct values and characteristics. Being aware of these differences is crucial when designing and launching campaigns. For example,

entrepreneurs should be attentive to signs that indicate repeat investments from crowd investors, such as reviews, comments, or active participation in the community. Identifying crowd investors who consistently engage in crowdlending platforms can be crucial, as these experienced investors are more likely to support new projects despite previous failures. However, while our results fostering crowdfunding experience and engaging experienced crowd investors are generally beneficial, there is a particular need for specialized support and education in the area of sustainability. In this sector, there seem to be different mechanisms, such as emotions, that can influence crowd investor behavior and decision-making processes. For example, crowdlending platforms could enhance transparency regarding the progress and outcomes of environmental projects. By providing detailed and frequent updates, platforms can mitigate the opacity that exacerbates negative reactions among experienced investors to project failures. Additionally, platforms could enhance their educational initiatives targeted at experienced crowd investors by focusing on the nuances of sustainability. These programs should clarify the risks of such investments while integrating effective communication strategies that underscore environmental projects' long-term benefits and impacts. Such initiatives may help mitigate negative effects after failures and maintain ongoing investor interest and support.

### **2.7.3 Limitations and future research implications**

As with every other study, our experiments are not without limitations due to our chosen materials, methods, and sample, which point to potential directions for future research (Simons et al., 2017). First, our vignettes offer a suitable way to study real-life behavior and possess good predictive power for real behavior. However, experimental designs may yield minor effects due to their simplification but uncover meaningful casual relationships among variables (e.g., Podsakoff & Podsakoff, 2019; Taylor, 2006). While aiming to replicate a realistic crowdlending campaign, we can only simulate certain attributes of the genuine



lending campaign. It is essential to recognize that investments in crowdlending are intricate, dependent on the interplay of various project attributes, including elements such as images and videos, which collectively shape and influence the behavior of crowd investors (e.g., Parhankangas & Renko, 2017). Hence, future research should explore how crowd investors make decisions in projects with diverse attributes to address these limitations. Moreover, we focused on the crowdlending context, positioned between traditional funding methods like venture capital and lower-risk models such as rewards-based crowdfunding (e.g., Bapna & Ganco, 2021), which may provide insights that bridge these funding methods. While venture capital investors are typically more experienced (e.g., Kim & Viswanathan, 2019) and already face uncertainty with sustainable ventures (Bocken, 2015), there remains a gap in understanding how experienced investors react to signals of failure and sustainability. We encourage future research to examine these dynamics, as this could extend our findings and address potential disadvantages sustainable ventures face. Moreover, in lower-stakes contexts like reward-based crowdfunding, investors generally behave more like consumers, with more newcomers and fewer experienced investors (Chan & Parhankangas, 2017). Hence, those inexperienced funders in low-stakes settings may parallel the tendencies of inexperienced crowd investors in our study. However, we encourage future studies to investigate our findings within different crowdfunding types.

Second, our study relies on decisions made with fictional monetary amounts, potentially leading to different effects than studies using real money and actual platform data. Future research could benefit from merging the strengths of experimental design with actual platform data to test external validity and offer a comprehensive perspective on the behavior of crowd investors. Third, it is essential to emphasize that we did not include a specific causal attribution for investment failure in our manipulation of failure. Although our reality checks revealed that participants categorized investment failure as realistic, it is important to

acknowledge that the lack of a defined cause could be a limitation because different causes of failure may lead to different reactions (e.g., Nutt, 1999). Hence, future research should investigate the influences of different reasons for failure, as they may shape subsequent investment decisions. Fourth, while our experimental design condenses the timeline of investment decisions to fit the lab setting, this might impact the study's external validity. However, the immediate feedback in this controlled environment may amplify participants' emotional and cognitive responses to failure. Although the proximity of events intensifies these reactions, they still offer valuable insights into underlying behavioral tendencies that align with those observed over more extended periods in real-world scenarios (e.g., Kahneman & Tversky, 1979; Shefrin & Statman, 1985). Thus, the core findings regarding investor behavior after failure remain relevant and informative even with the condensed timeline.

Fifth, while our chosen between-subject design is valuable for comparing behaviors and reactions (Aguinis & Bradley, 2014), it is essential to recognize the potential relevance of a within-subject design. In real life, individuals often can choose from a set of options (Charness et al., 2012), akin to the scenarios seen in crowdlending investments. Consequently, investors' responses to failure may vary depending on whether their personally selected option failed. However, it is worth noting that our between-subject design holds significant value because it provides the relevant advantage of a randomized sample occurring before the experience of failure. Lastly, concerning our sample, we specifically chose a German context, which can be seen as representative of other European countries (Hörisch & Tenner, 2020). However, our findings may not be readily applicable beyond this European context due to distinct institutional factors that significantly influence individual reactions (Schwartz, 1994), reactions to failure (Lewis et al., 2010), and preferences for sustainable values, which can vary among national cultures (Bento et al., 2019). To enhance the reliability

of our results and gain deeper insights, it would be beneficial to engage in cross-continental studies (Hörisch & Tenner, 2020).

## **2.8 Conclusion**

Our study sheds light on how crowd investors react to failure signals in the context of sustainable campaigns and how their reactions depend on their prior experience. We found that experienced investors generally invest significantly more after failures but are more sensitive and less willing to invest in environmental campaigns that do not achieve their goals. This reaction may stem from heightened emotional responses, as distinct values come into play alongside the double loss phenomenon—highlighting the unique expectations associated with environmental campaigns. These insights point to the need for tailored crowdfunding strategies that account for investors' specific experiences and values.

### **3. The hidden disadvantages of failure for female entrepreneurs in crowdlending:**

#### **Evidence from randomized experiments (Essay II)**

##### **Abstract**

Female entrepreneurs face funding barriers due to gender stereotypes applied by traditional investors, prompting them to turn to crowdlending as an alternative funding source. Although crowdlending offers promising opportunities for women, failure can reinforce lenders' gender biases. This study explores the role of failure cues in shaping gender biases in crowdlending. Using a multimethod experimental approach, our findings show that lenders favor male over female entrepreneurs after investment failure but not entrepreneurial failure. Additionally, socially-driven women-led ventures face more significant challenges in securing funding than men-led commercial ventures. This research contributes to literature related to gender, failure, and social entrepreneurship.

*Keywords:* gender bias, crowdlending, entrepreneurial failure, investment failure, social entrepreneurship

### 3.1 Introduction

Female entrepreneurs often face funding barriers from traditional investors such as banks and financial institutions (de Andrés et al., 2021; Kanze et al., 2018), which tend to favor male entrepreneurs based on pervasive gender stereotypes (e.g., Eddleston et al., 2016). Gendered stereotypes such as those framing women as innately nurturing and empathetic contribute to funding disparities by reducing support for women (Gupta et al., 2009; Malmström et al., 2020). As a result, many female entrepreneurs turn to alternative sources like crowdlending to obtain funding from nontraditional lenders (Bruton et al., 2015; Gafni et al., 2021). As its growth continues to outpace other models (e.g., donation-based or equity-based crowdfunding; Shneor et al., 2024), crowdlending holds promising for female entrepreneurs, with some studies suggesting that this model has fewer gender disadvantages than traditional funding (Chen et al., 2017; Slimane & Rousseau, 2020).

While providing promising funding opportunities to female entrepreneurs, crowdlending is also characterized by a high likelihood of postfunding failure (Vanacker et al., 2019), or *entrepreneurial failure*, in which an entrepreneur fails in a venture; reasons for failure include financial underperformance, increased costs, or changes in ownership (Shepherd, 2003). In addition to potentially associating entrepreneurs with a history of entrepreneurial failure (e.g., Bai & Gao, 2023; Roccapiore et al., 2021) postfunding failure also adversely affects crowd lenders, who face default on their portfolio and thus *investment failure* (e.g., Dorfleitner et al., 2023). In traditional funding contexts, failure increases the challenges faced by female entrepreneurs, as prior venture failure significantly diminishes their appeal to—and thus funding from—traditional investors, who tend to attribute men's failure to bad luck and women's failure to a lack of entrepreneurial ability (Pistilli et al., 2022). The distinct funding dynamics for female entrepreneurs in the crowdlending context

raises the following question: *How do crowd investors evaluate female entrepreneurs when investment and entrepreneurial failure experiences become salient?*

To answer this question, we engage the stereotype activation and application framework (Kunda & Sinclair, 1999; Kunda & Spencer, 2003; Wheeler & Petty, 2001) to examine how failure constitutes a situational cue that influences gender stereotype application in crowdlending. According to this framework, people (e.g., lenders) activate and apply stereotypes based on contextual factors such as motivational and situational cues; such cues determine the degree to which individuals rely on stereotypes in decision-making. While the crowdlending context may inhibit lenders' application of stereotypes, different failure cues may supersede inhibition and trigger stereotype application.

One reason crowd lenders may initially inhibit stereotypes is that they tend to be motivated by a mix of financial, prosocial, and communal considerations (Dinh, Isaak, & Yahyaoui, 2024; Dinh & Wehner, 2022). However, we argue that failure cues, whether investment or entrepreneurial, may trigger motivational cues, such as protecting self-worth, making lenders more likely to apply gender stereotypes (Kunda & Spencer, 2003). Consequently, crowd lenders are more likely to apply negative gender stereotypes to women and in turn be less likely to fund female entrepreneurs. Thus, failure acts as a stereotype-enhancing cue, reinforcing gender biases against female entrepreneurs. We also suggest that social venture framing aligns with feminine stereotypes of women (e.g., as community-oriented, nurturing), which increases the likelihood of stereotype activation after failure and thus further exacerbates funding disadvantages for female entrepreneurs.

We employed a multimethod experimental approach to examine the effects of prior failure on crowd lenders' investment decisions; we ensure causal inference and external validity through controlled comparisons. Study 1 ( $n = 172$ ) used an audio-based vignette

experiment to explore crowdlending behavior after investment failure, while Study 2 ( $n = 122$ ) implemented a metric conjoint experiment to assess the impact of prior entrepreneurial failure on lenders' decisions. Our results show that crowd lenders invest less after experiencing an investment failure and tend to favor men over female entrepreneurs in their future investment decisions. We also found that female entrepreneurs who frame their venture as socially driven face even more significant challenges securing investment than male entrepreneurs with a commercial focus. In contrast, regarding entrepreneurial failure, we did not observe differences in crowdlending outcomes between men and female entrepreneurs.

Our study contributes to three literature streams, with the first being the entrepreneurship literature on gender gaps in financing (e.g., Eddleston et al. 2016, Gornall and Strebulaev 2024), particularly in high-stakes crowdfunding (e.g., Bapna & Ganco, 2021; Kleinert & Mochkabadi, 2022), and explicitly crowdlending (e.g., Chen et al., 2017; Slimane & Rousseau, 2020) by uncovering disadvantages faced by female entrepreneurs in the context of investment failure. While prior research highlights a general preference for female entrepreneurs in crowdlending (Chen et al., 2017), our findings show that this advantage diminishes after lenders experience investment failure, indicating the application of stereotypes against female entrepreneurs. This nuance contributes to our understanding of gender biases in entrepreneurial finance by demonstrating that stereotyping is dynamic rather than static. While lenders may initially inhibit their gender biases, adverse experiences can motivate them to overcome inhibitions and reactivate stereotypes, thus reinforcing traditional disadvantages against female entrepreneurs.

Second, we contribute to the entrepreneurship literature on failure perspectives (e.g., Jenkins & McKelvie, 2016; Piening et al., 2021; Pistilli et al., 2022; Rieger et al., 2023) by

emphasizing the need to distinguish between entrepreneurial failure and investment failure. While prior research has primarily focused on campaign or entrepreneurial failure from the entrepreneur's perspective (e.g., Kleinert et al., 2022; Piening et al., 2021; Stevenson et al., 2022), lenders' reactions remain largely overlooked, a gap we fill by examining crowd lenders' responses to investment and entrepreneurial failure, revealing behavioral differences. Specifically, we show that lenders are more likely to exhibit bias against female entrepreneurs when lenders personally experience failure (i.e., investment failure) than when confronted with prior failure experienced by the entrepreneur (i.e., prior entrepreneurial failure). This distinction between experiential and external failure experiences highlights their differing effects on decision making, nuancing the discussion on failure perceptions.

Third, this study expands scholarly conversations on social entrepreneurship by addressing funding challenges for social ventures in the context of crowdlending. Our findings reveal that lenders' positive stereotyping of female entrepreneurs' focus on social venture framing (Anglin et al., 2022; Lee & Huang, 2018) can turn negative following investment failure, such that lenders reduce future support for women-led social ventures. This is particularly significant given the higher representation of women in this sector (e.g., Fernández-Guadano & Martín-López, 2023). By shedding light on the negative consequences of failure in social entrepreneurship, we contribute to the emerging literature on failure in this field, responding to calls for deeper investigation beyond its often optimistic framing (Czako et al., 2024; Patzelt & Shepherd, 2024; Wronka-Pośpiech, 2018).

### **3.2 Theoretical background and hypotheses**

#### **3.2.1 Stereotype activation and application framework**

Our theoretical framework engages the concepts of stereotype activation (i.e., the extent to which a stereotype becomes accessible in one's mind) and application (i.e., the



extent to which one uses an activated stereotype in judgment; Fein et al., 1999; Kunda & Sinclair, 1999; Kunda & Spencer, 2003). Although activation is a prerequisite for application, people do not always consciously apply activated stereotypes, as application depends on factors such as motivation and situational context. In the process of stereotype activation, external stimuli such as words or images can activate stereotypes, making stereotypical beliefs more accessible and applicable in an individual's mind (Kunda & Spencer, 2003). Encountering a stimulus may automatically activate a related stereotype, often without the person's conscious realization (Dryden, 2013; Greenwald & Banaji, 1995). After activation, the activated stereotypical beliefs will only influence decision-making when individuals apply stereotypes to judge a member of the stereotyped group (Kunda & Sinclair, 1999; Kunda & Spencer, 2003; Wheeler & Petty, 2001).

Kunda and Sinclair (1999) and Kunda and Spencer (2003) present both inhibitors and enhancers of stereotype activation and application. On the one hand, they argue that individuals may be motivated to avoid prejudice and make a conscious effort to suppress stereotypic thoughts and behaviors to align with personal egalitarian values or societal norms (Kunda & Spencer, 2003). This motivation is powerful when individuals are concerned about appearing prejudiced or have been explicitly instructed to avoid stereotyping (Kunda & Sinclair, 1999). On the other hand, self-enhancement goals can drive stereotype application, creating tension with the motivation to avoid prejudice. This is especially the case when individuals face criticism or threats to self-worth, as they use stereotypes to protect their self-esteem (Fein & Spencer, 1997; Kunda & Spencer, 2003; Taylor & Brown, 1988). In contrast, experiences affirming self-worth (e.g., positive feedback or reminders of secure relationships) reduce individuals' reliance on stereotypes by motivating avoidance of prejudice (Fein & Spencer, 1997; Mikulincer & Shaver, 2001).

### **3.2.2 Gender stereotypes in crowdlending**

In the entrepreneurial context, distinct stereotypes play a role, as such gender stereotypes are particularly relevant because they create significant barriers for female entrepreneurs (Jennings & Tonoyan, 2022; Uebbing et al., 2025). These stereotypes include perceptions of female entrepreneurs having lower competence (Gupta et al., 2008, 2013), being less capable innovators (Sundermeier, 2024), and achieving lesser success (Buttner & Rosen, 1988; Carter et al., 2007; Yang & del Carmen Triana, 2019), as well as the association of women with feminine-stereotyped behaviors such as warmth, nurturance, and emotional expressiveness (e.g., Balachandra et al., 2019). Additionally, the perceived “lack of fit” between stereotypical or culturally dominant ideas about femininity and entrepreneurship reinforces the notion that women are incongruous with entrepreneurial roles, further hindering their opportunities (Eddleston et al., 2016; Gupta et al., 2009; Kanze et al., 2020). Stereotypes shape societal perceptions and influence the behavior of potential investors who may in unconsciously perpetuate these stereotypes in their decision-making (Lee & Huang, 2018).

As an alternative financing source, crowdlending appears to reduce traditional disadvantages against female entrepreneurs. However, research indicates that these disadvantages may be less relevant as there are no differences in the lending for men and women (Barasinska & Schäfer, 2014; Slimane & Rousseau, 2020); crowdlending even potentially advantages female entrepreneurs (Chen et al., 2017; Theunissen & Millone, 2024). Stereotype activation may associate female entrepreneurs with stereotypically feminine traits, misaligning them with hegemonic concepts of successful entrepreneurship (Gupta et al., 2008, 2009). Stereotype activation may influence decision-making through both negative and positive stereotypes (Wheeler & Petty, 2001); for instance, positive views of female entrepreneurs as unique or promising can increase support (Lee & Huang, 2018). At the same

time, crowd lenders' motivation to avoid prejudice, balancing financial, personal, prosocial, and communal motives (Dinh, Isaak, & Yahyaoui, 2024; Dinh & Wehner, 2022), can inhibit stereotype application, prompting them to suppress stereotypes, which can ensure that female entrepreneurs receive equal support. In crowdlending, high motivation to inhibit stereotypes and fewer self-enhancement goals than traditional funding contexts suggest that stereotype activation and application remain low.

### **3.3 Gender stereotypes and failure in crowdlending**

While crowdlending offers an alternative funding mechanism that may help mitigate traditional biases, it remains unclear if this holds in the presence of failure cues that traditionally enhance gender stereotypes (Pistilli et al., 2022). In the traditional investment context, failure cues seem to enhance gender stereotypes. For instance, research shows that lenders attribute the failure of male entrepreneurs to bad luck and the failure of female entrepreneurs with poor entrepreneurial attitudes (Pistilli et al., 2022). This suggests that lenders perceive and judge failure more harshly for women than for their male counterparts (Pistilli et al., 2022) due to cognitive mechanisms like stereotype application.

Although failure negatively influences crowd lender behavior, scholars have not sufficiently addressed the specific effects of gender in this context. When it comes to investment failure in which lenders experience defaults in their portfolio and suffer financial losses, they tend to reduce future investments or withdraw entirely (Dorfleitner et al., 2023; Lindlar et al., 2025). Similarly, prior entrepreneurial failure, where an entrepreneur has previously failed in a venture, reduces entrepreneurs chances of securing funding, as crowd lenders are less likely to support them (Bai & Gao, 2023). Drawing on Kunda and Spencer's (2003), stereotype activation and application framework, we propose that entrepreneurial or investment failure acts as an external trigger or stereotypical cue that influences stereotype

application (Kunda & Spencer, 2003; Wheeler & Petty, 2001). Below we discuss two possible processes that may unfold when individuals encounter a failure cue.

First, failure cues may enhance the activation and application of gender stereotypes in the presence of self-enhancement goals (Kunda & Spencer, 2003), as failure serves as a reminder of financial goals and simultaneously threatens self-worth, in turn reinforcing self-enhancement goals. To satisfy these, an individual (such as a lender) may attempt to establish their superiority by using negative activated stereotypes to disparage others (Fein & Spencer, 1997). When individuals encounter failure or financial loss, their self-enhancement goals become particularly salient as they seek to protect their self-esteem and rationalize negative outcomes (Kunda & Spencer, 2003). In this context, applying activated group stereotypes can serve as a cognitive shortcut, allowing perceivers to shift responsibility away from personal or situational factors and onto group-based attributes. As a result, failure may increase the likelihood of stereotype application as lenders seek to preserve their self-perception and sense of control. We believe that stereotype application is influenced by a perceived misfit between the stereotypical attributes associated with female entrepreneurs and those deemed necessary for success in entrepreneurship (Gupta et al., 2008). Hence, failure cues can activate or reinforce this perception, decreasing support for female entrepreneurs in crowdlending.

Second, failure cues may alter the interpretation of stereotypical cues and beliefs. Stereotypical cues can have either positive or negative valence (Wheeler & Petty, 2001); on the more positive side, stereotypically feminine traits may sometimes be perceived as complementary or beneficial. However, failure cues may shift perceptions of such traits as “add-ons” or engaging qualities to viewing them as incompatible with the characteristics required to achieve financial goals and future success. Individuals may revert to traditional or culturally dominant thought patterns, reinforcing stereotypical images of entrepreneurs,

typically characterized by agentic qualities associated with stereotypical masculinity and, consequently, the assumption that men are a better fit for entrepreneurship, even after experiencing failure. A threat to lenders' self-worth could drive this shift (Kunda & Spencer, 2003), as crowd lenders are driven by both altruistic motives and financial considerations (Dinh, Isaak, & Yahyaoui, 2024; Dinh & Wehner, 2022)—where financial considerations reflect the investment nature of crowdlending. Lenders commit funds expecting potential returns yet also bear the risk of losses (Bruton et al., 2015)—unlike reward-based crowdfunding, in which stereotypically feminine traits may be perceived positively due to funders' prevalent altruistic motives (Anglin et al., 2022). As the relative weight of these motivations may shift depending on the context, we hypothesize:

**Hypothesis 1 (H1).** *a) Prior investment failure and b) prior entrepreneurial failure cues lower the chances for female entrepreneurs to receive future crowdlending compared to male entrepreneurs.*

### **3.4 The role of social venture framing**

To deepen our understanding of gender stereotypes, we examine how the gender-related cue of social venture framing intensifies biases against female entrepreneurs, particularly the negative perception of their failures. Following theoretical perspectives on stereotype activation and application, we assert that, as a special type of venture framing aligned with women gender stereotypes (Lee & Huang, 2018), social venture framing could serve as an additional environmental cue shaping stereotype application. Specifically, we propose that women founder of social ventures experience more significant funding disadvantages in cases of failure than male entrepreneurs leading commercial ventures due to the fact that a social venture framing with communal stimuli may interact with gender stereotypes about women that reinforce pre-existing biases in a failure context.

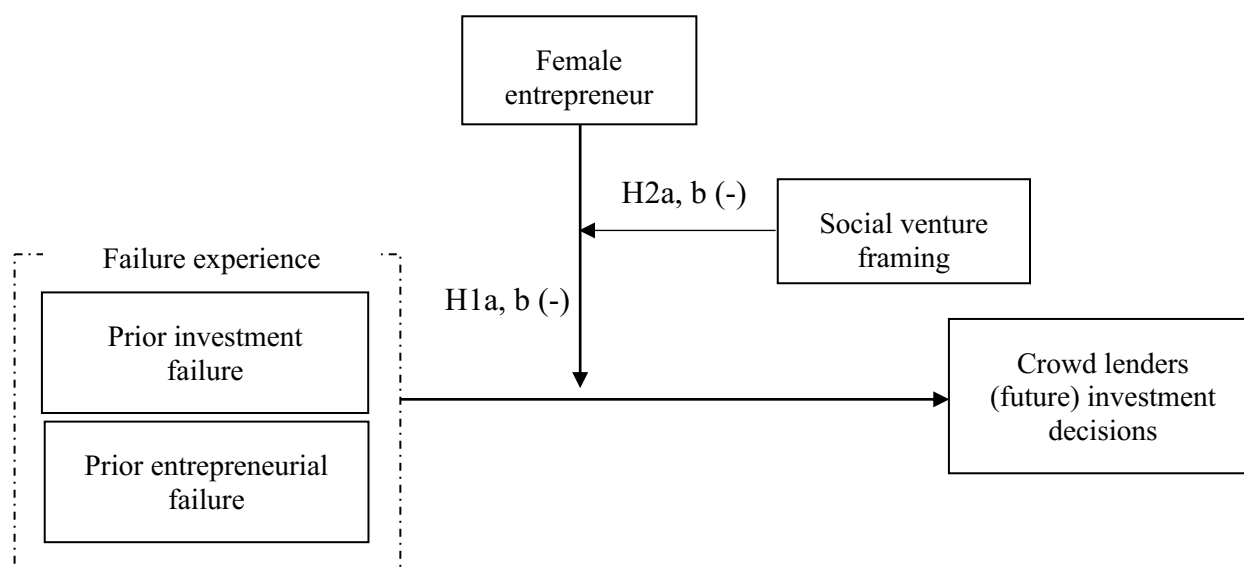
Often driven by prosocial motives rather than profit maximization (Moss et al., 2011), social ventures inherently align with communal stereotypes. Since women are already stereotypically perceived as communal, leading a social venture tends to reinforce related stereotypes that they lack financial acumen and business competence. In contrast, lenders associate commercial ventures with agentic traits, aligning with the traditional stereotype of male entrepreneurs (Gupta et al., 2009, 2019). While crowd lenders may initially support social ventures due to shared motivations of social impact (Bento, Gianfrate, & Thoni, 2019; Penz et al., 2022), their priorities may shift toward financial returns (Kollenda, 2022) following failure. This shift in focus, from social impact to financial self-interest, may intensify lenders' application of gender stereotypes.

As prior research suggests, social and communal stimuli may positively influence funding decisions in the pre-funding phase, aligning with aspects of crowd lenders' motivations (Bento, Gianfrate, & Thoni, 2019; Penz et al., 2022). However, when failure occurs, lenders seek to justify past decisions to protect their self-esteem, which may increase the likelihood of stereotype application (Kunda & Spencer, 2003; Wheeler & Petty, 2001) toward female entrepreneurs. Since social ventures are perceived as prioritizing impact over profitability (Moss et al., 2011), this might enhance the negative reactions of crowd lenders when evaluating women-led ventures after failure. As a result, lenders may judge female entrepreneurs more harshly and reinforce stereotypes about their business acumen and risk-taking abilities.

**Hypothesis 2 (H2).** *A social venture framing enhances the negative effect of (a) investment and (b) entrepreneurial failure, decreasing the chances for female entrepreneurs to receive future crowdlending.*

**Figure 3-1** shows our conceptual model and all hypothesized relationships.

**Figure 3-1: Conceptual model (Essay II)**



*Note.* Female entrepreneur: the reference category is male entrepreneur; social venture framing: the reference

### 3.5 Methods and results

To test our hypotheses, we follow a multimethod approach, including an audio-based vignette experiment examining the effects of prior *investment failure* (Study 1) and a metric conjoint experiment investigating the effects of prior *entrepreneurial failure* (Study 2). Both experiments are embedded in the context of crowdlending.

#### 3.5.1 Methods Study 1: Audio vignette study—prior investment failure perspective

In the first study, our audio vignette experiment placed research participants in the role of crowd lenders to investigate how a prior investment failure influences future investment decisions (H1a and H2a). Specifically, we examined how the outcome of a prior investment that resulted in an investment failure affects lenders' gender bias in future investment decisions, as well as how social venture framing may enhance these effects. We opted for an experimental vignette design to investigate the causal relationships between the manipulated variables and to control for the effects of a failure.

### 3.5.1.1 Experimental design

Study 1 began by introducing participants to crowdlending and its risks and informing them that they had €10,000 in savings to invest. They were then randomly assigned to one of four audio vignettes, each presenting a crowdlending pitch with a specific venture framing (social or commercial) and entrepreneur gender (woman or man). The audio pitch presenting a social venture framing described a digital platform that aimed to integrate refugees into the labor market (see details in Appendix B1). The audio pitch presenting the commercial venture framing focused on developing a financial platform to achieve rapid growth and high revenue through partnerships (see details in Appendix B2). To maintain ecological validity (Schmuckler, 2001), professional actors voiced the pitches, each lasting about 1 minute and 10 seconds. Although video pitches are a significant factor in the success of crowdfunding ventures (Kolbe et al., 2022), we opted for audio pitches over video pitches to minimize the potential influence of visual factors such as perceived physical attractiveness, age, or race that threaten internal validity (e.g., Lee & Huang, 2018).<sup>4</sup>

Given our focus on crowdlending (Bretschneider & Leimeister, 2017), we added additional information to the audio pitches, such as the hypothetical 7 percent return<sup>5</sup> over two years and a consistent statement underscoring the project's prospects for growth and the solidity of its business plan (Mason & Stark, 2004). After hearing the pitch, participants allocated between €0 and €10,000 to the venture, with any remaining funds being held in a non-interest-bearing savings account. They later received a simulated failure notification, informing them that the venture had failed, resulting in a total loss of their investment (see

---

<sup>4</sup> To ensure realism and practical relevance, we searched on Kickstarter—one of the largest crowdfunding platforms—confirmed that entrepreneurs are able to add audios to their campaigns (Kickstarter, 2023).

<sup>5</sup> We chose a 7 percent return on investment for our study, a figure derived from the average of 122 campaigns on *bettervest.com*. Moreover, Shneor et al. (2024) compared the interest rates on European crowdlending platforms and found an average interest rate of 7.41 percent for crowdlending.



details in Appendix B3). Subsequently, participants were given another €10,000 and asked whether they would invest in a venture with the same values and entrepreneur gender as before. The study concluded with open-ended questions about perceived reasons for failure, key scenario information, and demographic data collection.

### **3.5.1.2 Pre-study**

To ensure the validity of the audio vignettes, we conducted a pre-test with 159 German participants (recruited via Prolific, independent of the main sample). The sample had an average age of 31 years ( $SD = 10.20$ ) and a gender distribution of 49.06% female, 49.59% male, and 1.26% gender diverse people. Participants rated the realism of the recordings on a 5-point Likert scale, with the female entrepreneur's voice averaging 4.13 ( $SD = 0.54$ ) and the male entrepreneur's voice 4.00 ( $SD = 0.61$ ). Additional measures (e.g., understanding, sympathy, attractiveness) revealed no significant differences ( $p > .05$ ) between men's and women's voices, confirming the suitability of the audio vignettes for the main experiment.

### **3.5.1.3 Sample**

Participants were recruited via Prolific, targeting German individuals with investment (e.g., stocks, funds) or crowdfunding experience (e.g., Dinh & Wehner, 2022; Hsu et al., 2017; Kleinert et al., 2022; Penz et al., 2022). Drawn by the potential financial returns (Ribeiro-Navarrete et al., 2021; Ziegler & Shneor, 2020), crowdlending attracts both traditional lenders and newcomers (Burtch et al., 2014; Ziegler & Shneor, 2020), making both groups relevant for our study. Controlling for experience levels showed no significant differences, reinforcing sample validity. To obtain this selection criterion for our study, we selected a screener for participants on Prolific based on whether they had ever invested in standard company stocks or shares or had crowdfunding experience. We selected Prolific due

to its higher participant attention and retention compared to other platforms (Douglas et al., 2023).

A power analysis drawing on G\*Power (Faul et al., 2009) determined a required sample size of 129 ( $\alpha = 0.05$ , power level:  $1 - \beta = 0.95$ , effect size = 0.15). We employed a linear multiple regression with four predictors (entrepreneurs' gender: women, men, and venture framing: social, commercial). Our final sample comprised 172 participants from Germany (45.3 % women). We initially recruited 223 participants, but 22.6% failed the manipulation check and 13.2% lacked investment experience (for details, see implementation and manipulation checks below). The participants had an average investment experience of 5.01 ( $SD = 4.90$ ) years, and were 31.78 ( $SD = 8.82$ ) years old. 26.5% had crowdfunding experience, and 45.8% had a monthly income above €3,001.

#### 3.5.1.4 Study variables

*Dependent variable.* Our dependent variable is *future investment after prior investment failure*. We followed previous experimental research that operationalized crowd lenders' investment as a success indicator (e.g., Kanze et al., 2018; Shneor & Vik, 2020). Using a slider scale ranging from €0 to €10,000, participants indicated how much they would invest in the entrepreneur's venture both before and after failure.<sup>6</sup> To assess future investments, we focused on amounts chosen after experiencing failure.

*Independent variable.* To measure differences between women and male entrepreneurs, we created a dummy variable (woman = 1), manipulating gender through voice

---

<sup>6</sup> We used the term "invest" in our studies based on an analysis of common crowdlending platforms, which revealed that platforms like bettervest.de, invesdor.de, and wiwin.de predominantly use the phrasing "invest now" when addressing their lenders. To maintain ecological validity and ensure our studies reflect common practices, we aligned with this wording, as it mirrors the language lenders are most familiar with.

and text cues (e.g., “I am the woman founder of Socialy”)<sup>7</sup>. We also created a dummy variable for stereotypical behavior, coding women social entrepreneurs as one and men commercial entrepreneurs as zero, applying the same logic to women commercial entrepreneurs and men social entrepreneurs. Venture framing was manipulated through scripted pitches: one emphasized social impact (e.g., refugee integration), while the other focused on commercial growth (e.g., revenue and customer expansion).

*Control variables.* We controlled for the pre-failure investments to ensure any observed differences after failure were not due to initial disparities. Moreover, we acknowledged the impact of sociodemographic characteristics like age, gender, income, and crowdfunding experience on crowdlending choices (Penz et al., 2022; Tenner & Hörisch, 2021). To ensure the validity of participant responses, we incorporated a social desirability measure (see Appendix B4).

### **3.5.1.5 Validity and quality checks**

First, we conducted a manipulation check after each of the four audio pitches to ensure participants’ comprehension (Shadish et al., 2003), asking potential participants to select the gender of the entrepreneur pitching the campaign and the venture framing. Those who failed to correctly acknowledge the entrepreneur’s gender as stated in their pitch were excluded from the experiment. We excluded 22.6% of potential participants due to this failed manipulation check. Second, we included an attention check to improve data quality, which required participants to select a specific response option (e.g., “For this item, please select ‘strongly disagree’”). All participants passed the attention check.

---

<sup>7</sup> In our experiment, we used the German terms “Gründer” and “Gründerin” to distinguish between men and female entrepreneurs.

Third, participants completed three 5-point Likert scale items to assess realism and validity (Maute & Dubés, 1999). Two items measured realism: “How realistic was the investment option?” ( $M = 3.68$ ,  $SD = 0.81$ ) and “How well could you imagine the described situation?” ( $M = 4.12$ ,  $SD = 0.80$ ). One item assessed validity: “How carefully did you listen to the audio pitch?” ( $M = 4.60$ ,  $SD = 0.57$ ). We also examined variations in realism across the four vignettes and found no significant differences.

### 3.5.2 Results: Study 1

Our primary analysis focused on testing hypotheses H1a and H2a to understand how prior investment failure influences their future investment behavior. We used ordinary least squares (OLS) regression, addressing heteroscedasticity and multicollinearity concerns by checking standard errors and variance inflation factors (VIF), which remained well below the threshold of 5 (Cohen et al., 2002). We controlled for pre-failure investments to isolate the effect of failure on subsequent decisions, as well as minimized biases related to social desirability, risk-taking, and demographics. A balance check (see Appendix B5) confirmed no significant variances across the four groups, supporting the validity of our findings. **Table 3-1** outlines the means, standard deviations, and correlations among the dependent and control variables.

Our results show that crowd lenders invested significantly less after experiencing an investment failure ( $M_{\text{diff}} = -1293.61$ ,  $t(171) = -9.56$ ,  $p < .001$ ). OLS regression (**Table 3-2**) revealed that lenders allocated less to female entrepreneurs after failure than male entrepreneurs ( $b = 504.67$ ,  $p = .02$ ), confirming H1a. Additionally, a separate regression showed that female entrepreneurs with a social venture framing received more negative bias in future investment decisions after failure compared to male entrepreneurs with a commercial venture framing ( $b = -808.81$ ,  $p = .01$ ), supporting H2a.

Table 3-1: Means, standard deviations, and correlations (Study 1)

| Variable                     | M        | SD       | 1.    | 2.     | 3.   | 4.   | 5.     | 6.   | 7.   | 8.  | 9.   |
|------------------------------|----------|----------|-------|--------|------|------|--------|------|------|-----|------|
| 1. Investment allocation t1  | 2,976.74 | 2,672.20 |       |        |      |      |        |      |      |     |      |
| 2. Investment allocation t2  | 1,683.14 | 2,104.83 | .75** |        |      |      |        |      |      |     |      |
| 3. Female entrepreneur       | 0.49     | 0.50     | -.11  | -.20** |      |      |        |      |      |     |      |
| 4. Social mission            | 0.52     | 0.50     | .00   | -.05   | -.03 |      |        |      |      |     |      |
| 5. Female crowd lender       | 0.45     | 0.50     | .07   | -.03   | .06  | -.04 |        |      |      |     |      |
| 6. Age                       | 31.33    | 8.87     | -.06  | -.04   | .02  | .03  | -.05   |      |      |     |      |
| 7. Crowdfunding experience   | 1.75     | 0.43     | .17*  | .12    | .03  | .01  | .04    | -.08 |      |     |      |
| 8. Social desirability       | 3.37     | 0.61     | .12   | .15*   | -.05 | .04  | -.01   | -.03 | .05  |     |      |
| 9. Willingness to take risks | 3.14     | 0.90     | .02   | .16*   | .02  | .09  | -.30** | -.01 | -.05 | .12 |      |
| 10. Income                   | 3.50     | 1.51     | -.07  | -.01   | .02  | -.03 | -.16*  | .19* | -.09 | .05 | .20* |

Note.  $N = 172$ , female entrepreneur: female entrepreneur = 1, male entrepreneur = 0; Social mission: social = 1, commercial = 0; Female crowd lender: female crowd lender = 1, male crowd lender = 0; Investment experience in years: Income 1 = < €1,000; 2 = €1,001 to €2,000; 3 = €2,001 to €3,000; 4 = €3,001 to €4,000; 5 = > €4,001.

\*\*  $p < 0.01$

\*  $p < 0.05$

Table 3-2: Regression coefficients, standard errors, and model summary (Study 1)

| DV = Future investment after prior investment failure |                              |           |         |                                         |           |          |                                     |           |          |          |
|-------------------------------------------------------|------------------------------|-----------|---------|-----------------------------------------|-----------|----------|-------------------------------------|-----------|----------|----------|
| Variable                                              | Model 1                      |           |         | Model 2                                 |           |          | Model 3                             |           |          | <i>p</i> |
|                                                       | Reference: Male entrepreneur |           |         | Reference: Male commercial entrepreneur |           |          | Reference: Male social entrepreneur |           |          |          |
|                                                       | <i>b</i>                     | <i>SE</i> | $\beta$ | <i>b</i>                                | <i>SE</i> | $\beta$  | <i>b</i>                            | <i>SE</i> | $\beta$  |          |
| <i>Main effect</i>                                    |                              |           |         |                                         |           |          |                                     |           |          |          |
| Female entrepreneur                                   | -504.67                      | 210.37    | -.12    |                                         |           |          |                                     |           |          |          |
| Female social entrepreneur                            |                              |           |         | -808.81                                 | 302.56    | -.17     | .01                                 | -476.89   | 291.11   | -.10     |
| Male social entrepreneur                              |                              |           |         | -331.92                                 | 297.15    | -.07     | .27                                 |           |          |          |
| Female commercial entrepreneur                        |                              |           |         | -556.86                                 | 303.90    | -.11     | .07                                 | -224.95   | 291.91   | -.05     |
| Male commercial entrepreneur                          |                              |           |         |                                         |           |          |                                     | 331.92    | 297.15   | .07      |
| <i>Control variables</i>                              |                              |           |         |                                         |           |          |                                     |           |          |          |
| Investment allocation t1                              | .57                          | .04       | .73     | .57                                     | .04       | .73      | <.001                               | .57       | .04      | .73      |
| Age                                                   | -.13                         | 12.01     | .00     | .68                                     | 12.02     | .00      | .95                                 | .68       | 12.02    | .00      |
| Female crowd lender                                   | -169.24                      | 221.10    | -.04    | -172.99                                 | 221.30    | -.04     | .44                                 | -172.99   | 221.30   | -.04     |
| Crowdfunding experience                               | 45.16                        | 245.27    | .01     | 51.79                                   | 245.34    | .01      | .83                                 | 51.79     | 245.34   | .01      |
| Social desirability                                   | 156.35                       | 173.60    | .05     | 166.20                                  | 173.88    | .05      | .34                                 | 166.20    | 173.88   | .05      |
| Willingness to take risks                             | 305.31                       | 124.26    | .13     | 322.82                                  | 124.99    | .14      | .01                                 | 322.82    | 124.99   | .14      |
| Income                                                | 13.74                        | 72.45     | .01     | 5.63                                    | 73.14     | .00      | .94                                 | 5.63      | 73.14    | .00      |
| Constant                                              | -1308.38                     |           | .16     |                                         |           | -1221.30 | .19                                 |           | -1553.22 | .10      |
| <i>R</i> <sup>2</sup>                                 |                              | .77       |         |                                         |           | .78      |                                     |           | .78      |          |

Note. *N* = 172, *b* = unstandardized effect, *SE* = standard error,  $\beta$  = standardized effect, DV = dependent variable; Reference category: male entrepreneur = 0, man commercial mission = 0; Female crowd lender = 1, male crowd lender = 0; Income 1 = < €1,000; 2 = €1,001 to €2,000; 3 = €2,001 to €3,000; 4 = €3,001 to €4,000; 5 = > €4,001; Crowdfunding experience yes = 1, no = 2.

### **3.5.3 Methods Study 2: Metric conjoint analysis—prior entrepreneurial failure perspective**

In Study 2, we conducted a metric conjoint experiment with crowd lenders to investigate how entrepreneurs' gender and experiences of prior entrepreneurial failure affect lenders' investment behavior. In metric conjoint experiments, lenders make multiple investment decisions (Warnick et al., 2018). We selected this within-subject approach because it allowed us to systematically manipulate the prior entrepreneurial failure variable across different entrepreneur profiles (gender and venture framing) while holding other factors constant (Lohrke et al., 2010). This revealed how the same lenders evaluated successful or non-experienced versus failed entrepreneurs under comparable conditions, reducing noise from individual differences in risk preferences. Furthermore, the conjoint design helped identify causal relationships (Aguinis & Bradley, 2014).

#### **3.5.3.1 Experimental design**

The study material was similar to Study 1. Participants had to judge hypothetical lending options on a fictitious crowdlending platform. Due to our focus on crowdlending and failure, we provided details about the project's hypothetical 7% return over two years before presenting participants with lending options. Each option combined three attributes—two with two values and one with three—resulting in 12 decision profiles. We randomized the lending options and fully replicated profiles following Schüller et al. (2024) to control for ordering effects. We also included a practice profile to familiarize participants with the experiment (see Appendix B6). In total, participants made 25 decisions.

#### **3.5.3.2 Pre-study**

A pre-test with 28 participants assessed the effectiveness of our manipulations and replication manageability. The sample (53.6% women) had an average age of 32 years

( $SD = 10.85$ ) and 5.54 years of investment experience ( $SD = 4.30$ ). The pre-test profiles showed a mean test-retest correlation of 0.78, confirming response reliability (Schüler et al., 2024). Open-text responses validated the correct implementation of manipulated attributes (venture framing, entrepreneurial experience, and gender). A multilevel analysis (random intercept fixed slope model, RIFS) confirmed significant differences in participants' decisions ( $\chi^2 = 321.99, p < .001$ ), explaining 35% (pseudo- $R^2$ ) of decision-level variance. With no issues detected, we proceeded with the main study.

### 3.5.3.3 Sample

We recruited participants following the same procedure as in Study 1, with our final sample including 122 participants, one of which had to be excluded due to illogical answers (e.g., investment experience of 1,500 years). This sample size aligns with the standards of other conjoint studies and their methodological requirements (Schüler et al., 2024). The sample consists of 52.6% women participants with an average age of 31.66 years ( $SD = 8.80$ ) and an average investment experience of 5.36 years ( $SD = 4.91$ ). 17.2% reported prior crowdfunding experience. A monthly income above €3,001 was reported by 53.3% of the participants.

### 3.5.3.4 Study variables

*Dependent variable.* Consistent with metric conjoint analysis (Shepherd & Zacharakis, 2018), we measured investment decisions using a single-item approach. Participants responded to the question, “What is the probability that you would invest in this option?” on a scale of 1 (low) to 7 (high), a common measure in entrepreneurship funding research (Warnick et al., 2018).

*Independent variables.* We detailed the primary Level 1 variables in the conjoint experiment in the decision profiles and summarized them in **Table 3-3**. We manipulated the



independent variables: entrepreneur's gender (female/male), entrepreneurial experience (none, prior failure, prior success), and venture framing (social/commercial).

*Control variables.* To ensure consistency, we included the same control variables as in Study 1 (see Appendix B4).

**Table 3-3: Description of attributes (Study 2)**

| Attribute                        | Level                      | Description                                                                                                                                                                                                                                   |
|----------------------------------|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Venture framing                  | Social venture framing     | It is a social startup. A social mission characterizes this social startup, as it generates revenue to achieve social objectives (e.g., an app that assists in integrating refugees into the labor market).                                   |
|                                  | Commercial venture framing | It is a profit-oriented startup. A commercial mission characterizes this startup, as it generates revenue to achieve growth without pursuing specific social objectives (e.g., an app that assists investors in financial advising/planning). |
| Prior entrepreneurial experience | Prior failure              | The person who founded the startup previously failed with their prior startup.                                                                                                                                                                |
|                                  | No prior experience        | The person who founded the startup has not had any prior entrepreneurial experience.                                                                                                                                                          |
|                                  | Prior success              | The person who founded the startup was successful with a prior startup.                                                                                                                                                                       |
| Entrepreneur gender              | Female                     | A female has founded and is leading the startup.                                                                                                                                                                                              |
|                                  | Male                       | A male has founded and is leading the startup.                                                                                                                                                                                                |

### 3.5.4 Results: Study 2

Each participant made 24 decisions (12 initial and 12 replicated), totaling 2,928 observations with a test-retest reliability of 0.73 (Schüler et al., 2024). We applied multilevel

regression analyses to account for the nonindependence of observations, thereby ensuring accurate effect estimates and valid statistical inferences. **Table 3-4** presents the means, standard deviations, and correlations among dependent and control variables.

First, we tested a null model with only random intercepts. The significant chi-square value ( $\chi^2 = 34.26, p < .001$ ) confirmed that variance in crowd lenders' evaluations stems from different characteristic combinations, justifying multilevel analysis. To test our hypotheses, we then added Level 1 variables, computing a random intercept fixed slope (RIFS) model. The overall pseudo- $R^2$  was 40%. Our analysis showed that crowd lenders were less likely to invest in entrepreneurs with prior failure than those with prior success ( $\beta = -2.74, p < .001$ ). Changing the reference category to no entrepreneurial experience revealed that entrepreneurs with prior failure ( $\beta = -0.60, p < .001$ ) were also significantly less likely to receive investment. For H1b and H2b, we tested Level 1 interactions (**Table 3-5**); no significant difference emerged between gender and prior entrepreneurial failure ( $\beta = -0.02, p = .86$ ), leading us to reject H1b. To test H2b, we added a triple interaction to examine whether social venture framing influenced the effect of female entrepreneurs with prior failure. As the result was insignificant ( $\beta = 0.01, p = .97$ ), leading us to reject H2b.

**Table 3-4: Means, standard deviations, and correlations**

|                              | <i>M</i> | <i>SD</i> | 1    | 2     | 3     | 4    | 5   | 6    |
|------------------------------|----------|-----------|------|-------|-------|------|-----|------|
| 1. Investment probability    | 4.13     | .72       |      |       |       |      |     |      |
| 2. Age                       | 31.66    | 8.80      | -.13 |       |       |      |     |      |
| 3. Female crowd lender       | 1.52     | .52       | .00  | .05   |       |      |     |      |
| 4. Crowdfunding experience   | 0.17     | .38       | .02  | .09   | .01   |      |     |      |
| 5. Willingness to take risks | 3.24     | .88       | .12  | -.04  | .24** | -.04 |     |      |
| 6. Social desirability       | 1.56     | .31       | .17  | -.04  | -.13  | -.14 | .09 |      |
| 7. Income                    | 3.63     | 1.42      | .02  | .27** | .18*  | .17  | .07 | -.07 |

*Note.*  $N = 122$ . *M* = mean, *SD* = standard deviation; Female crowd lender: female crowd lender = 1, male crowd lender = 0; Crowdfunding experience: yes = 1, no = 0; Income 1 = < €1,000; 2 = €1,001 to €2,000; 3 = €2,001 to €3,000; 4 = €3,001 to €4,000; 5 = > €4,001.

Table 3-5: Regression coefficients, standard errors, and model summary (Study 2)

| Variable                      | Model 1 |      |       | Model 2 |      |       | Model 3 |      |       | Model 4 |      |       |
|-------------------------------|---------|------|-------|---------|------|-------|---------|------|-------|---------|------|-------|
|                               | Coef.   | SE   | p     | Coef.   | SE   | p     | Coef.   | SE   | p     | Coef.   | SE   | p     |
| <i>Level 1 variables</i>      |         |      |       |         |      |       |         |      |       |         |      |       |
| Female entrepreneur           | 0.12    | 0.05 | .01   | 0.14    | 0.08 | .09   | 0.12    | 0.08 | .14   | 0.16    | 0.11 | .12   |
| Prior entrepreneurial failure | -2.74   | 0.06 | <.001 | -2.73   | 0.08 | <.001 | -2.74   | 0.08 | <.001 | -2.73   | 0.08 | <.001 |
| No entrepreneurial experience | -2.14   | 0.06 | <.001 | -2.12   | 0.08 | <.001 | -2.14   | 0.06 | <.001 | -2.12   | 0.08 | <.001 |
| Social mission                | -0.26   | 0.05 | <.001 | -0.26   | 0.05 | <.001 | -0.26   | 0.07 | <.001 | -0.26   | 0.07 | <.001 |
| <i>Level 1 interactions</i>   |         |      |       |         |      |       |         |      |       |         |      |       |
| Female*Fail                   |         |      |       | -0.02   | 0.12 | .86   | -0.01   | 0.12 | .95   | -0.05   | 0.14 | .71   |
| Female*No exp.                |         |      |       | -0.03   | 0.12 | .78   |         |      |       | -0.09   | 0.14 | .52   |
| Female*Social                 |         |      |       |         |      |       | 0.01    | 0.11 | .94   | -0.05   | 0.13 | .70   |
| Female*Fail*Social            |         |      |       |         |      |       | 0.01    | 0.14 | .97   | 0.07    | 0.16 | .69   |
| Female*No exp.*Social         |         |      |       |         |      |       |         |      |       | 0.12    | 0.16 | .47   |
| <i>Controls</i>               |         |      |       |         |      |       |         |      |       |         |      |       |
| Age                           | -0.01   | 0.01 | .12   | -0.01   | 0.01 | .12   | -0.01   | 0.01 | .12   | -0.01   | 0.01 | 0.12  |
| Female crowd lender           | -0.01   | 0.13 | .93   | -0.01   | 0.13 | .93   | -0.01   | 0.13 | .93   | -0.01   | 0.13 | 0.93  |
| Crowdfunding experience       | 0.09    | 0.17 | .61   | 0.09    | 0.17 | .61   | 0.09    | 0.17 | .61   | 0.09    | 0.17 | 0.61  |
| Willingness to take risks     | 0.08    | 0.07 | .31   | 0.08    | 0.07 | .31   | 0.08    | 0.07 | .31   | 0.08    | 0.07 | 0.31  |
| Social desirability           | 0.39    | 0.21 | .07   | 0.39    | 0.21 | .07   | 0.39    | 0.21 | .07   | 0.39    | 0.21 | 0.07  |
| Income                        | 0.03    | 0.05 | .51   | 0.03    | 0.05 | .51   | 0.03    | 0.05 | .51   | 0.03    | 0.05 | 0.51  |
| Intercept                     | 5.23    | 0.50 | <.001 | 5.22    | 0.50 | <.001 | 5.23    | 0.50 | <.001 | 5.22    | 0.50 | <.001 |
| <i>Variance component</i>     |         |      |       |         |      |       |         |      |       |         |      |       |
| Residual variance             | 1.65    |      |       | 1.65    |      |       | 1.65    |      |       | 1.65    |      |       |
| Intercept variance            | 0.42    |      |       | 0.42    |      |       | 0.45    |      |       | 0.45    |      |       |

Note. 2,928 decisions in  $N = 122$ ; ICC (null-model) = 0.11. Maximum likelihood estimations. *Coef.* = regression coefficients of predictors,  $p$  = p-value; *SE* = robust standard errors; No exp. = no entrepreneurial experience; Female entrepreneurs = 1, male entrepreneurs = 0; Prior entrepreneurial failure = 1, successful entrepreneurial experience = 0; no entrepreneurial experience = 1; Social mission = 1, commercial mission

### 3.5.5 Robustness Study 2

Due to the missing results on gender and social venture framing (H1b, H2b) in Study 2, we conducted a robustness check using another metric conjoint experiment with modified attributes. Specifically, we adjusted the attributes to reflect that all entrepreneurs had experienced a prior failure, as stated in the study's introduction. The key decision-relevant attributes included entrepreneur gender (represented by names commonly associated with either men or women rather than explicit gender descriptors) and prior failure attributions (internal vs. external; Küssbauer & Baum, 2020), given that all entrepreneurs had experienced failure, as well as social versus commercial venture framing. These attributes enabled us to examine how crowd lenders respond to entrepreneurs' prior failure experiences and how gender and social venture framing influence investment decisions. Our recruitment and filtering approach mirrored Studies 1 and 2. Our final sample included 108 participants, with 7% excluded for consistently selecting the same values or patterns. The primary sample was 47.2% women, with an average age of 34.32 ( $SD = 8.65$ ), and 47% had crowdfunding experience.

Using the dependent variable from Study 2, we adapted the independent variables, manipulating entrepreneur gender, prior failure attributions, and social versus commercial venture framing (see Appendix B7-B8). Following Studies 1 and 2, we controlled for lenders' gender, age, income, crowdfunding experience, and social desirability (see Appendix B4).

Each participant made 16 decisions (eight initial, eight replicated), totaling 1,728 observations with a test-retest reliability of 0.86 (Schüler et al., 2024). Multilevel regression analysis accounted for the nonindependence of observations. Results showed that social venture framing was less attractive than commercial framing ( $\beta = -0.30, p < .001$ ). Entrepreneurs attributing prior failure to internal causes (i.e., attributable to personal traits or

actions) were less likely to receive funding than those citing external factors (i.e., arising from situational factors;  $\beta = -0.57, p < .001$ ). Testing our hypotheses, we found no evidence that crowd lenders disadvantage female entrepreneurs with prior entrepreneurial failure ( $\beta = 0.06, p = .28$ ). A moderation analysis for social venture framing and failed female entrepreneurs showed no significant effect ( $\beta = 0.11, p = .32$ ). Additional analyses tested Level 2 interactions for crowd lenders' gender, revealing that women lenders were more likely to invest in female entrepreneurs after entrepreneurial failure compared to male entrepreneurs ( $\beta = 0.21, p = .057$ ) (**Table 3-6**).

**Table 3-6: Robustness check: Results of the multilevel analysis (Study 2)**

| Variable                     | Model 1 |      |       | Model 2 |      |       | Model 3 |      |       | Model 4 |      |       |
|------------------------------|---------|------|-------|---------|------|-------|---------|------|-------|---------|------|-------|
|                              | Coef.   | SE   | p     | Coef.   | SE   | p     | Coef.   | SE   | p     | Coef.   | SE   | p     |
| <i>Level 1 variables</i>     |         |      |       |         |      |       |         |      |       |         |      |       |
| Female entrepreneur          | 0.06    | 0.05 | .28   | 0.01    | 0.08 | .95   | 0.01    | 0.10 | .89   | -0.40   | 0.07 | .60   |
| Internal failure attribution | -0.57   | 0.05 | <.001 | -0.57   | 0.05 | <.001 | -0.56   | 0.10 | <.001 | -0.57   | 0.05 | <.001 |
| Social mission               | -0.30   | 0.05 | <.001 | -0.35   | 0.08 | <.001 | -0.35   | 0.10 | <.001 | -0.30   | 0.05 | <.001 |
| <i>Level 1 interactions</i>  |         |      |       |         |      |       |         |      |       |         |      |       |
| Female*Social                |         |      |       | 0.11    | 0.11 | .32   | 0.11    | 0.11 | .32   |         |      |       |
| Female*Internal              |         |      |       |         |      |       | -0.02   | 0.11 | .88   |         |      |       |
| Internal*Social              |         |      |       |         |      |       | -0.12   | 0.11 | .92   |         |      |       |
| <i>Level 2 interactions</i>  |         |      |       |         |      |       |         |      |       |         |      |       |
| Female*Female crowd lender   |         |      |       |         |      |       |         |      |       | 0.21    | 0.11 | .06   |
| <i>Controls</i>              |         |      |       |         |      |       |         |      |       |         |      |       |
| Age                          | 0.00    | 0.01 | .87   | 0.00    | 0.01 | .87   | 0.00    | 0.01 | .87   | 0.00    | 0.01 | .87   |
| Female crowd lender          | 0.32    | 0.22 | .14   | 0.32    | 0.22 | .14   | 0.32    | 0.22 | .14   | 0.21    | 0.22 | .33   |
| Crowdfunding experience      | -0.23   | 0.20 | .25   | -0.23   | 0.20 | .25   | -0.23   | 0.20 | .25   | -0.23   | 0.20 | .25   |
| Willingness to take risks    | 0.13    | 0.11 | .30   | 0.13    | 0.11 | .30   | 0.13    | 0.11 | .30   | 0.13    | 0.11 | .30   |
| Social desirability          | -0.19   | 0.37 | .61   | -0.19   | 0.37 | .61   | -0.19   | 0.37 | .61   | -0.19   | 0.37 | .61   |
| Income                       | 0.02    | 0.08 | .79   | 0.02    | 0.08 | .79   | 0.02    | 0.08 | .79   | 0.02    | 0.08 | .79   |
| Intercept                    | 3.78    | 0.89 | <.001 | 3.81    | 0.89 | <.001 | 3.80    | 0.90 | <.001 | 3.83    | 0.90 | <.001 |
| <i>Variance component</i>    |         |      |       |         |      |       |         |      |       |         |      |       |
| Residual variance            | 1.30    |      |       | 1.30    |      |       | 1.30    |      |       | 1.30    |      |       |
| Intercept variance           | 1.01    |      |       | 1.01    |      |       | 1.01    |      |       | 1.01    |      |       |

Note. 1,728 decisions in  $N = 108$ . Maximum likelihood estimations. *Coef.* = regression coefficients of predictors,  $p$  = p-value; *SE* = standard errors; Female entrepreneurs = 1, male entrepreneurs = 0; Social mission = 1, commercial mission = 0; Female crowd lender: Female = 1, male = 0; Crowdfunding experience: yes = 1, no = 0.

### **3.6 Discussion**

The current research offers novel insights into gender biases in crowdlending. Our two empirical studies show that crowd lenders reduce their investment activity following an investment failure and favor male entrepreneurs over female entrepreneurs in subsequent investment decisions. Furthermore, female entrepreneurs who use social ventures framing encounter even more significant difficulties securing funding after failure than male entrepreneurs with a commercial focus. In contrast, we do not observe gender-related differences in crowdlending outcomes regarding entrepreneurial failure.

#### **3.6.1 A dynamic perspective on gender biases**

This research contributes to the growing literature on gender gaps in financing (e.g., Bapna & Ganco, 2021; Gornall & Strebulaev, 2024), particularly in crowdlending (e.g., Chen et al., 2017; Slimane & Rousseau, 2020) by adding a nuanced failure perspective that theorizes stereotype application toward female entrepreneurs. Our findings from Study 1 reveal that investment failure in women-led ventures significantly alters crowd lenders' future investment decisions, reducing their willingness to fund female entrepreneurs compared to male entrepreneurs. This shift suggests that self-related failure experiences (i.e., investment failure) prompt crowd lenders to adopt self-protective behaviors, heightening their reliance on pre-existing gender stereotypes. Because failure diminishes self-worth, this leads individuals to use stereotype-based reasoning as a psychological defense mechanism (Kunda & Spencer, 2003). Consequently, lenders may justify their losses by attributing them to what they perceive as female entrepreneurs' lack of competence rather than external market factors, thus reinforcing negative biases.

This behavioral shift aligns with research on attribution biases in failure contexts, which suggests that individuals are more likely to explain women's failures as intrinsic (e.g.,

lack of entrepreneurial ability) and men's failures as extrinsic (e.g., bad luck or market conditions) (Swim & Sanna, 1996). Our findings extend this perspective by illustrating that failure in crowdlending alters crowd lenders' subsequent investment behavior, ultimately disadvantaging women in the long run. By contrast, male entrepreneurs may benefit from an "experience effect" (Sarasvathy et al., 2010), where lenders interpret failure as a learning opportunity that enhances men's entrepreneurial acumen (Shepherd, 2003). In investment contexts, this differential treatment underscores how gender bias and its underlying stereotype application may not be static but situationally activated, particularly when lenders experience personal financial losses. While lenders may initially suppress gender biases due to their motivations, negative experiences—such as investment losses—can trigger self-protective reasoning, leading them to reinforce pre-existing stereotypes. This highlights the situational nature of bias, emphasizing that even in environments with less overt gender disparities, external triggers can resurface and amplify them, ultimately shaping investment decisions in ways that disadvantage female entrepreneurs.

### **3.6.2 A more nuanced understanding of distinct failure types**

Our research also enriches the entrepreneurship literature on failure perspectives (e.g., Jenkins & McKelvie, 2016; Piening et al., 2021; Pistilli et al., 2022; Rieger et al., 2023) by underscoring the necessity of differentiating between various types of failure in crowdlending. Prior studies have examined failure from multiple angles, including campaign failure and its effect on entrepreneurs' willingness to initiate new campaigns (e.g., Piening et al., 2021; Stevenson et al., 2022), the personal consequences of entrepreneurial failure (Botelho & Chang, 2023; Byrne & Shepherd, 2015; Engel et al., 2021), and the implications for entrepreneurs when platforms reject their campaigns (Kleinert et al., 2022). While these perspectives provide valuable insights, they primarily focus on entrepreneurs and their



responses, leaving supporters' reactions, which are essential for venture success, underexamined. We extend on existing scholarship by integrating the perspective of a key supporter group: crowd lenders.

Our studies show that both investment and entrepreneurial failure negatively influence future investments. Specifically, Study 1 reveals that crowd lenders' experiences of investment failure leads to reduced investments in the future, which reduces opportunities for entrepreneurs and their campaigns. This finding aligns with previous research on investment failure experience (Dorfleitner et al., 2023; Hornuf et al., 2021). Study 2 demonstrates that crowd lenders are also more hesitant to invest in entrepreneurs who have previously experienced failure than in those with either a successful or no prior entrepreneurial history. This upholds the perspective that crowd lenders are generally risk-averse and may struggle to recognize or anticipate the potential learning benefits that past entrepreneurial failures could provide. Although these results align with research in equity crowdfunding (Zunino et al., 2022), they contradict the findings from previous research in venture capital (VC) funding; for instance, Souakri et al. (2023) found a positive valuation of entrepreneurial failure, which contrasts with the negative perception observed in our crowdlending study. This discrepancy suggests varying assessments of failure by different types of investors. One possible explanation may be the relative inexperience of crowd lenders compared to VC investors, who often possess a more profound history with failed entrepreneurs and have a more nuanced interpretation of failure (Souakri et al., 2023).

Furthermore, incorporating a gender perspective, our findings did not reveal gender biases against female entrepreneurs after entrepreneurial failures. This aligns with research on early-stage investors, which similarly found no funding differences between women and male entrepreneurs after entrepreneurial failure (Roccapiore et al., 2021). One possible explanation

is that, unlike investment failure, entrepreneurial failure does not directly threaten the self-enhancement goals of crowd lenders. Since entrepreneurial failure pertains to the entrepreneur rather than the lender, it may not trigger the same stereotype-driven biases that arise when lenders experience financial losses themselves. Additionally, gendered framing (i.e., explicit versus implicit) may play a role in lenders' decisions. Study 2 explicitly exposed respondents to the entrepreneur's gender as a varying lending criterion when evaluating lending opportunities, potentially encouraging more deliberate and socially desirable responses, which might imply greater suppression of gender stereotypes. In contrast, Study 1, which assessed investment failure, presented gender cues more subtly, allowing for greater reliance on implicit biases. This distinction suggests that the manner in which gender information is presented can influence the extent to which lenders consciously apply stereotypes in their investment decisions. We argue that this reinforces the importance of understanding the situational activation of gender biases in entrepreneurial finance.

We also identify a nuanced boundary condition in the reactions of crowd lenders to failed entrepreneurs. Our additional analysis from the robustness check in Study 2 suggests that homophily may explain why specific crowd lenders are more willing to invest in failed entrepreneurs. Specifically, female crowd lenders are significantly more likely to invest in female entrepreneurs after failure. This aligns with the idea that shared identity fosters greater leniency, influencing how failure is perceived, rationalized, and forgiven. At the same time, failure may also heighten awareness of differences (e.g., gender differences) that could in turn reinforce biases (e.g., "I am male, and the female entrepreneur failed"), potentially leading to more negative consequences. Our findings contrast with recent research on VC funding, which show the opposite effect (Snellman & Solal, 2023). Future research should further explore this perspective, as it contributes to the homophily literature (Greenberg & Mollick,

2017; Wang & Prokop, 2025) and offers valuable insights into gender dynamics in entrepreneurial financing.

### **3.6.3 Highlighting funding challenges of social ventures**

Our research further contributes to social entrepreneurship literature by addressing funding challenges for social ventures in crowdlending (e.g., Aouni et al., 2024; Schätzlein et al., 2023) by introducing novel insights related to gender and failure cues. We consider the extent to which investment failure experiences influence the persistence of stereotypes in future funding decisions. Our study did not reveal distinct responses to the failure of social or commercial ventures. This partially contradicts Hornuf et al. (2021), who found that equity investors disadvantage ventures focusing on community welfare after failure.

However, we demonstrate that additional gender-related cues, such as displaying communal or social traits, amplify stereotype application among crowd lenders, ultimately disadvantaging female entrepreneurs compared to their male entrepreneurs, showing gender-related cues such as commercial traits. This finding contradicts previous research that suggests female entrepreneurs do not necessarily face disadvantages, but rather the presence of feminine signals triggers disadvantages (Balachandra et al., 2019). Our results indicate a different pattern: while social traits do not negatively impact male entrepreneurs, they disadvantage female entrepreneurs. This pattern aligns with other research showing that while failures of women-led social ventures are judged more harshly while men-led venture failures face less stigma, even when they deviate from traditional roles (Yang & del Carmen Triana, 2019). This might stem from gender stereotypes and the context of social entrepreneurship, which often requires a balance between business acumen and social empathy (e.g., Anand et al., 2021). Men might be seen as exceptional for engaging in socially oriented ventures, thus benefiting from a “halo effect” (Thorndike, 1920), where their business skills are assumed to

align with their social focus. In contrast, women in similar roles might not receive the same reinforcement, as their involvement in socially focused ventures appears to reinforce traditional gender roles and thus triggers additional stereotype application regarding their business competence.

### **3.7 Practical implications**

Our findings demonstrate that investment failure can activate gender biases, disproportionately disadvantaging female entrepreneurs. To address this issue, crowdlending platforms could implement measures that reduce the influence of unconscious bias in investment decisions. One effective approach could be anonymizing gender-related information during the initial evaluation stages to ensure that funding decisions are based on business potential rather than investor stereotypes. Platforms could also integrate lender education programs highlighting common attribution biases, helping crowd lenders recognize the ways gendered assumptions may influence their perceptions of failure.

Female entrepreneurs leading social ventures face heightened funding challenges, particularly after failure, as gender stereotypes intersect with biases against socially driven businesses. To counteract this disadvantage, crowdlending platforms could introduce targeted financial support mechanisms, such as dedicated funding pools or matching grants for women-led social enterprises. Moreover, platforms could leverage algorithmic adjustments to enhance the visibility of these ventures, ensuring that implicit biases do not elide promising projects. By adopting these strategies, platforms can help level the playing field for female entrepreneurs in social ventures, fostering a more inclusive and equitable investment landscape.

### **3.8 Limitations and future research**

Although our multimethod experimental design enabled us to establish a comprehensive empirical picture of our research question and we took steps to ensure that our experiments' internal and ecological validity, this study has limitations. Despite crafting audio vignettes inspired by actual fundraising campaigns, our study environment was simulated. Notably, research shows that decisions in hypothetical scenarios align closely with choices in real situations with high stakes (Kühberger et al., 2002). While it is feasible to upload audio on crowdfunding platforms (Kickstarter, 2023) and we consciously elected to minimize visual bias, a blend of both audio and visual elements could offer a more comprehensive perspective, especially as video pitches are significantly more common in practice for persuading lenders (e.g., Kolbe et al., 2022). Therefore, subsequent research could reaffirm and verify our findings using video pitches. To that end, future research could benefit from merging the strengths of experimental design with accurate platform data to test external validity and offer a comprehensive perspective on the influence of failure.

Second, we developed a lenders' decision situation in which we used clear-cut categories such as gender (Johnson et al., 2018), social venture framing (Lee & Huang, 2018), and entrepreneurial experience (Zunino et al., 2022). These attributes significantly influence lenders' decisions; however, crowdlending decisions are multifaceted and depend on a combination of various project characteristics, including how such characteristics are presented on the platform (e.g., through images, stories, other visual and verbal elements; Parhankangas & Renko, 2017; Slimane & Rousseau, 2020). Future research could investigate how more nuanced variations or other presentations of the lending campaign, such as certifications (e.g., Penz et al., 2022), herding (e.g., Colombo et al., 2015), or different interest

rates (e.g., Dinh & Wehner, 2022), might affect the valuation of female entrepreneurs in lenders' investment decisions.

Third, because participants assessed ventures using hypothetical money rather than real funds, the experience of a “real loss” was absent, potentially limiting the generalizability of our findings. However, our findings can still identify causal effects, and actual losses would likely trigger stronger reactions. Since our study focused on causal investigation in an experimental setting, we cannot fully determine the exact impact of real losses. Future research could use platform data to examine spillover effects related to gender and validate our findings.

Fourth, our experimental setup did not specify a particular reason for the failure cue, aiming instead to gauge general reactions to failure; whether due to internal factors, external circumstances, or even a voluntary exit, the cause of failure might elicit varied reactions from crowd lenders (e.g., Nutt, 1999). Therefore, future research should not only distinguish between the different perspectives of failure included in our study but also explore the subtle behavioral differences between different failure reasons and voluntary exit (e.g., Justo et al., 2015).

Fifth, our analysis focuses on crowdlending, which may limit its applicability to other crowdfunding types. Although Bretschneider and Leimeister (2017) categorize lending, reward, and equity under incentives crowdfunding types, our findings offer insights but are not fully transferable, thus calling for further research across contexts. For instance, in reward-based crowdfunding, future studies could expand on Oberoi et al. (2022), who found that backers' reactions to failed rewards depend on the psychological contract (whether positive or negative). In equity crowdfunding, reactions may be more substantial due to

higher financial stakes. Our study lays the groundwork for exploring investor responses to failure across different crowdfunding models.

Finally, our sample engages a German context representing other European countries (Hörisch & Tenner, 2020). The applicability of our insights outside of Europe might be limited due to unique institutional factors that profoundly shape perceptions of gender roles in entrepreneurship (Mueller & Conway Dato-on, 2013); lenders' reactions to failures (Lewis et al., 2010); and different cultural values regarding social values, which show international variation (Bento, Gianfrate, & Thoni, 2019). Conducting transnational comparative studies would be instrumental in validating our findings and providing more comprehensive insights (Tenner & Hörisch, 2021)

### **3.9 Conclusion**

Overall, our study reveals that investment failure triggers gender biases in crowdlending, disproportionately disadvantaging female entrepreneurs. While women social entrepreneurs typically benefit from positive gender stereotypes in reward-based crowdfunding, they face greater obstacles in crowdlending. However, our findings show that prior entrepreneurial failures negatively impact funding outcomes for all entrepreneurs regardless of gender, suggesting that lenders do not consistently apply gender stereotypes in failure contexts. These insights highlight the complex interplay between gender and failure cues, illustrating both female entrepreneurs' disadvantages and the conditions within which biases may not apply. We hope to inspire further research by expanding ongoing scholarly discussions of these dynamics.

#### **4. A metric-conjoint experiment on crowd lenders' responses to failure attributions of entrepreneurs (Essay III)**

##### **Abstract**

Crowdlending offers entrepreneurs and lenders a low-barrier alternative to traditional finance but operates under high uncertainty and limited firm-level information, requiring reliance on observable cues. One crucial cue arises when entrepreneurs disclose and explain prior failure. Drawing on attribution theory, we examine how crowd lenders respond to different failure attributions and how this shapes willingness to invest. Using a metric-conjoint experiment in Germany ( $N = 78$ ; 2,496 observations) and analysing results with linear mixed-effects models, we find that lenders react more positively to internal, controllable, and unstable attributions compared to external, stable, and uncontrollable causes. Moreover, gender differences emerged, with female lenders responding differently from men. By shifting the focus from the self-responses by entrepreneurs to lender evaluations, we extend attribution theory to the crowdlending context and demonstrate how gender shapes the interpretation of failure signals. These insights advance understanding of decision-making in alternative entrepreneurial finance, informing entrepreneurs, lenders, and platform design.

*Keywords:* crowd lenders, decision-making, failure, attribution theory, gender



## 4.1 Introduction

Failure is an inherent aspect of entrepreneurship, with approximately two-thirds of businesses ceasing operations within their first five years (Czakov et al., 2024; Jenkins & McKelvie, 2016; Roccapiore et al., 2021). Typically, it is defined as the termination of a venture that has fallen short of its economic goals due to an inability to sustain operations or generate sufficient returns (Ucbasaran et al., 2013). Despite the prevalence of failure, however, many entrepreneurs persist in launching new ventures and seeking funding (Alalawi et al., 2025; Plehn-Dujowich, 2010; van Praag, 2003). In these instances, their track record of failure becomes a critical cue for potential investors.

While failure occurs across all forms of entrepreneurial finance, it is particularly pronounced in crowdlending, where default rates remain a significant concern (Dorfleitner et al., 2023). Crowdlending enables entrepreneurs to raise funds from many individual lenders by offering repayment with interest, typically via online platforms that facilitate borrower–lender matching (Escudero et al., 2025). Examples of these platforms include bettervest.com and LendingClub. Estimates suggest that by 2025, the global crowdlending market will grow to US\$33.70 billion, which is an increase of 4.30% from the previous year (Statista, 2024). By removing institutional intermediaries, crowdlending lowers barriers to capital but also reduces formal screening, leaving lenders with limited borrower information (Cumming & Sewaid, 2024). Consequently, lenders must rely on surface-level cues provided on the platform to assess entrepreneurial credibility and competence (Cumming & Hornuf, 2022; Hoegen et al., 2018; Shafi, 2019). Among these cues, an entrepreneur's experience, especially a history of failure, can be crucial in shaping lender perceptions (McSweeney et al., 2025).

Previous research shows that prior entrepreneurial failure can be perceived both positively and negatively by crowd lenders (Bai & Gao, 2023; McSweeney et al., 2025). For

example, Roccapiore et al. (2021) find that prior failure leads to negative perceptions of entrepreneurs (e.g. lower perceived competence and trustworthiness), to the extent that entrepreneurs with prior failure are viewed more negatively compared to entrepreneurs without any entrepreneurial experience. This, in turn, can negatively impact investors' willingness to invest (Zunino et al., 2022). At the same time, existing evidence suggests that prior failure can be reframed as a learning experience that increases resilience and skill, thereby enhancing entrepreneurial credibility when presented effectively (Cumming & Hornuf, 2022; Ucbasaran et al., 2013). However, this positive interpretation is highly contingent on contextual factors, such as an entrepreneur's narrative framing (Anglin, Wolfe, et al., 2018; Shepherd & Patzelt, 2015). Crowd lenders tend to be a more heterogeneous group and less experienced than traditional investors, and, hence, they may be particularly sensitive to such framing (Burtch et al., 2016).

The underlying mechanisms driving crowd lenders' positive or negative reactions remain insufficiently understood. Accordingly, we introduce attribution theory (Weiner, 1985), which suggests that observer reactions depend on how they attribute the causes of an outcome based on the dimensions of locus of causality (internal vs. external), stability (stable vs. unstable), and controllability (controllable vs. uncontrollable). Applying attribution theory helps explain why some crowd lenders react to failure negatively, for example, when it is attributed to external, stable causes, while others interpret failure more positively, for instance, when attributed to internal or unstable causes. It is important for crowd lenders to investigate these mechanisms, as they are often unaware of the underlying rationale driving their decisions, which may lead to suboptimal investment outcomes. For example, they could choose to fund an entrepreneur who has not failed before, rather than one who has, because

they see prior failure as a negative cue. However, in reality, the latter may actually lead to a better return on investment.

Moreover, the impact of boundary conditions on lender perceptions of previously failed entrepreneurs is scattered and ambiguous (Anglin, Wolfe, et al., 2018). In particular, the gender of the crowd lender seems to be important, but underdeveloped (Wang & Prokop, 2025). Crowd lenders are highly diverse, coming from various backgrounds and experiences, which shape their investment behaviours (Burtch et al., 2014; Cumming & Hornuf, 2022; Dushnitsky et al., 2016). Although approximately 70% of crowd lenders are men, the share of women lenders is steadily increasing (Shneor et al., 2024). Previous research on equity crowdfunding, an investment model closely related to crowdlending, suggests that gender differences impact investment preferences. For instance, inexperienced female crowd investors are more likely to support women entrepreneurs (Bapna & Ganco, 2021; Harrison et al., 2020). Furthermore, women who join women-only networks invest more frequently and are more open to other investors opinions compared to women in mixed networks (Harrison et al., 2020). As entrepreneurial failure is perceived either positively or negatively in crowdlending (Bai & Gao, 2023), how a lender's gender influences failure attributions in either direction remains unclear (Mohammadi & Shafi, 2018). Given that failure is a high-risk signal, and risk tolerance varies by gender (Hervé et al., 2019; Ren et al., 2025), it is critical to investigate whether male and female crowd lenders interpret failure attributions differently. This is important as it can help crowd lenders become more aware of their own potential biases. For instance, male lenders are more willing to support previously failed entrepreneurs, that is, due to the higher risks associated with such entrepreneurs, while female lenders are more cautious, which may lead to an unequal gender distribution of support and limit the diversity of perspectives in investment decisions. This may reduce long-term success for both

lenders and ventures, as diverse funding teams have shown to improve the success of ventures (Greenberg & Mollick, 2017).

In this regard, we aim to answer the following research questions: *How do crowd lenders react to distinct failure attributions of entrepreneurs? How does the gender of crowd lenders impact their reactions to an entrepreneur's attribution of failure?* To answer these two research questions, we employ a metric-conjoint experiment ( $N = 78, 2,496$  observations), a method that enables scholars to evaluate how individuals make complex, multidimensional decisions by presenting them with systematically varied profiles and quantifying their preferences (Green & Srinivasan, 1978). We chose this method because it mirrors the real-world decision environment of crowd lenders, who must simultaneously consider multiple pieces of information when making funding decisions.

This study offers three important contributions. First, while prior research primarily focuses on entrepreneur's internal responses to failure (Anglin et al., 2025; Berchicci & Boons, 2025; Sewaid et al., 2025), we shift attention to third-party reactions (Bai & Gao, 2023; Roccapiore et al., 2021; Souakri et al., 2023), highlighting the relevance of failure attributions as an observable cue in early-stage funding decisions. Second, we investigate these third-party reactions in the context of crowdlending, where lenders lack access to detailed firm-level data and face high uncertainty, by showing that entrepreneurial failure substitutes for formal evaluation mechanisms (Bai & Gao, 2023; Bort et al., 2024; Cumming & Sewaid, 2024; Zunino et al., 2022). Third, we contribute to gender research in entrepreneurial finance by examining whether male and female crowd lenders interpret failure attributions differently (Bapna & Ganco, 2021; Mohammadi & Shafi, 2018), thereby offering new insights into how lender reactions shape inequality dynamics in alternative finance. In this way, we directly respond to the call by Roccapiore et al. (2021).

## **4.2 Theoretical background and hypotheses development**

### **4.2.1 Attribution theory**

Attribution theory (Heider, 1958; Weiner, 1985) provides a suitable framework for examining how crowd lenders respond to causes of failure (Kibler et al., 2017; Mandl et al., 2016). Heider (1958) describes individuals as intuitive psychologists striving to understand the world. According to attribution theory, individuals seek causal explanations for success or failure along three dimensions: locus of causality, controllability, and stability (Weiner, 1985). While this framework has been applied extensively to understand social and organisational judgements, its application to investment decision-making, particularly in the context of entrepreneurial failure, remains underexplored (Kibler et al., 2017; Mandl et al., 2016; Sewaid et al., 2025).

The locus of causality identifies whether the cause of an event is internal, such as personal traits or actions, or external, meaning arising from situational factors (Harvey et al., 2014). Controllability refers to whether the factors are under an individual's control (Weiner, 1985), and stability reflects whether the causes persist over time (Harvey et al., 2014). These dimensions influence psychological responses, including affective reactions and expectations for future success, which inform subsequent actions (Weiner, 1985). These mechanisms are particularly relevant in negative events, such as entrepreneurial failure, where the need to find explanations for potential causes is heightened (Gendolla & Koller, 2001; Sewaid et al., 2025). Research on entrepreneurial failure has shown that entrepreneurs' descriptions of failure align with configurations of attribution dimensions (Mandl et al., 2016). In the context of crowdlending, entrepreneurs can explain their failures to potential lenders along these dimensions to influence affective responses, expectations of success, and investment decisions.

#### **4.2.2 Failure in crowdlending**

Crowdfunding allows entrepreneurs to raise capital from a large pool of funders via online platforms, encompassing donation-based, reward-based, equity-based, and lending-based models (Escudero et al., 2025; Rejeb et al., 2024). Unlike donation-based models, which rely on voluntary contributions with no financial return, or reward-based approaches, where funders receive non-monetary incentives, crowdlending involves debt financing, requiring entrepreneurs to repay loans with interest (Cumming & Sewaid, 2024; Escudero et al., 2025). In contrast to equity crowdfunding, where funders receive company shares, crowd lenders act as lenders rather than co-owners (Escudero et al., 2025).

Crowdlending operates in a high-uncertainty, information-asymmetric environment, where entrepreneurs have insights about their skills and venture risks that lenders cannot directly observe (Cumming & Hornuf, 2022; Cumming & Sewaid, 2024; Hoegen et al., 2018). Other than traditional financial institutions, crowd lenders lack access to extensive due diligence and rely on heuristic cues, such as prior experience, to assess credibility and risk (Davies & Giovannetti, 2022). Accurate assessments are vital for minimising risk and maximising returns (Hoegen et al., 2018; Slimane & Rousseau, 2020), as unsecured crowdlending loans can have default rates as high as 27% (Dorfleitner et al., 2023; Kgoroadira et al., 2019; Vanacker et al., 2019).

Due to limited verifiable information, the characteristics of entrepreneurs and impressions derived from them play a key role in crowdlending decision-making (Hoegen et al., 2018). Prior experience, for instance, constitutes critical information for crowd lenders that can affect financing success (Chila et al., 2025; Huang et al., 2022). Previous research thus far has examined the impact of prior entrepreneurial or crowdfunding experience on financing outcomes (Davies & Giovannetti, 2022; Huang et al., 2022). Entrepreneurial

experience, is highlighted as a key criterion for investment decisions in early-stage ventures (Escudero et al., 2025). In particular, an entrepreneur's experience reflects their prior activities and may influence crowdfunding success (Zunino et al., 2022). However, researchers emphasise the importance of distinguishing between previous successes and failures. Given the high failure rates of start-ups and the tendency of many individuals to re-enter entrepreneurship despite past failures (Al-alawi et al., 2025; Plehn-Dujowich, 2010), understanding the implications of past failures is crucial. Many entrepreneurs seeking crowdfunding have likely experienced entrepreneurial failure (McSweeney et al., 2025), which poses challenges in securing financial resources (Lindlar et al., 2025).

Initial evidence suggests that crowd lenders react both positively and negatively to entrepreneurs with prior failures (Bai & Gao, 2023; Zunino et al., 2022). This pattern is consistent with attribution theory, which posits that in the absence of complete information, external evaluators rely on observable cues to infer underlying characteristics. Thus, in the context of crowdlending, an entrepreneur's history of success or failure provides such cues, shaping lender attributions regarding the entrepreneur's competence, trustworthiness, and potential (Cardon et al., 2011; Zunino et al., 2022).

#### **4.2.3 Formulation of hypotheses**

##### **4.2.3.1 Locus of causality and investment willingness among crowd lenders**

According to attribution theory, individuals infer the causes of others' actions by assigning responsibility either to internal dispositions or external circumstances (Weiner, 1985). In the context of crowdlending, the explanations of entrepreneurs for past failure, whether framed as internally or externally caused, serve as an observable cue that shapes how crowd lenders assess their credibility and investment potential. However, the favourability of these attributions remains debated due to mixed implications for investment and credibility.

While external attributions may help entrepreneurs distance themselves from failure by framing it as circumstantial, for example, market conditions or team issues (Sewaid et al., 2025), the relevance of these attributions for crowd lenders remains contested. For lenders, such explanations can mitigate concerns about emotional instability or poor leadership continuity (Kibler et al., 2017; Walsh & Cunningham, 2017). Therefore, crowd lenders may view external attributions with suspicion. Due to the fundamental attribution error, observers tend to overemphasise personal responsibility and underemphasise situational factors when evaluating others' failures (Pronin et al., 2004). Thus, crowd lenders may perceive external attributions as evasive or self-serving, which could potentially undermine trust in an entrepreneur's integrity and competence.

Conversely, internal attribution, which means to take responsibility for failure, can signal credibility and responsibility (Jenkins et al., 2024) and positively influence entrepreneur behaviours (Lee et al., 2024), which in turn fosters lender trust. When entrepreneurs acknowledge personal responsibility, it aligns with expectations regarding the cause of failure (Kibler et al., 2017). Consistent with this view, Lee and Tiedens (2001) found that individuals in high entrepreneurial positions who adopt internal attributions are perceived as more credible after negative events. Credibility serves as a crucial cue for entrepreneurs to secure investments in crowdfunding (Courtney et al., 2017; Huang et al., 2022). Furthermore, Dinh et al. (2024) suggest that crowd lenders are not solely driven by financial returns but also by social and altruistic motivations. Thus, entrepreneurs demonstrating accountability for their failures may resonate with crowd lenders' desire to support responsible, resilient, and socially conscious ventures.

Beyond credibility, internal attribution signals self-reflection and learning potential (Lee et al., 2024), as entrepreneurs who recognise their own role in failure are more likely to



develop corrective strategies and improve future performance (Cope, 2011; Lee & Chiravuri, 2019). In addition, it may also promote counterfactual thinking, whereby entrepreneurs actively analyse what they could have done differently to develop effective strategies for the future, which also benefits the crowd lender who invests in the business (Baron, 2008; Yamakawa et al., 2010). Internal attribution can thus facilitate learning from failure, fostering the development of entrepreneurial knowledge, skills, and personal growth (Espinoza-Benavides & Díaz, 2019; Walsh & Cunningham, 2017; Yamakawa et al., 2010).

If entrepreneurs perceive the learning effects as insufficient relative to the failure costs, they may be less inclined to pursue entrepreneurship again (Ucbasaran et al., 2013). As prior entrepreneurial success strongly increases the likelihood of subsequent success, while prior failure does not, the framing of past failures emerges as an especially important cue for crowd lenders (Gompers et al., 2010). A subsequent venture, combined with internal attribution, could signal to lenders that an entrepreneur is resilient, has addressed necessary personal adjustments, has experienced learning effects, and is capable of bearing the costs of failure (Mantere et al., 2013; Ucbasaran et al., 2013; Yamakawa et al., 2010). Conversely, external attribution may demonstrate that entrepreneurs are unlikely to change their behaviour in the future, even though lenders may regard such behaviour as the cause of failure due to the fundamental attribution error (Harvey et al., 2014; Ross, 1977; Yamakawa et al., 2010).

Overall, while external attributions may reduce personal blame, they can also appear as an avoidance of responsibility, weakening lender confidence. In contrast, internal attribution enhances credibility, signals learning, and aligns with lender expectations, possibly rendering it a more favourable strategy in crowdlending decisions. Therefore, we hypothesise the following:

**Hypothesis 1a (H1a).** *Crowd lenders react more positively to internal than external attributions of failure.*

#### **4.2.3.2 Controllability and investment willingness among crowd lenders**

Controllability refers to the extent to which entrepreneurs control the causes of failure. Luck and task difficulty are considered uncontrollable, whereas effort and ability are controllable (Harvey et al., 2014; Weiner, 1985). Attribution theory suggests that failures attributed to uncontrollable causes tend to elicit sympathy, while those stemming from controllable mistakes provoke frustration or blame (Graham, 1991). Kibler et al. (2017) found that entrepreneurs who attribute failure to uncontrollable factors are perceived as more legitimate by the general public.

However, different stakeholders may exhibit varying reactions to attributions depending on their relationship with the failed entrepreneur (Kibler et al., 2017). Unlike passive observers, investors engage in financial risk-taking and expect entrepreneurs to exert control over key business outcomes (Frydrych et al., 2014). Entrepreneurs play central roles in determining a venture's success or failure (Müller et al., 2023), making their attributions to uncontrollable factors potentially concerning for investors (Lee & Tiedens, 2001). While an entrepreneur may genuinely lack control over external circumstances, acknowledging this lack of control may signal an inability to secure critical resources, adapt to challenges, or make necessary adjustments (Lee & Robinson, 2000; Marshall et al., 2020).

Conversely, attributing failure to controllable factors signals self-awareness and a proactive attitude toward improvement. Entrepreneurs who take responsibility for failure demonstrate a capacity for learning and adjustment, thereby reducing lender concerns about repeated mistakes (Amankwah-Amoah et al., 2022; Harvey et al., 2014). Since crowd lenders have limited means to verify an entrepreneur's capabilities (Hoegen et al., 2018), controllable

attributions may be important heuristic cues that suggest learning potential and resilience (Roccapiore et al., 2021). Additionally, entrepreneurs who acknowledge and learn from controllable mistakes are more likely to receive support. Attribution theory suggests that individuals who recognise their role in failure and actively address it are perceived as more competent and capable of future success (Ucbasaran et al., 2013). However, attributing failure to uncontrollable factors may raise doubts among lenders about an entrepreneur's ability to make necessary corrections or their ability to gain control over critical resources in the future, thereby increasing the likelihood of repeated failures (Harvey et al., 2014; Lee & Robinson, 2000).

Thus, while uncontrollable attributions might elicit sympathy, they can also signal passivity and raise doubts about an entrepreneur's ability to adapt. In contrast, controllable attributions suggest learning, self-improvement, and reduced likelihood of future failure, making them a stronger signal of investment potential. Hence, we hypothesise the following:

**Hypothesis 1b (H1b).** *Crowd lenders react more positively to controllable rather than uncontrollable failure attributions.*

#### 4.2.3.3 Stability and investment willingness among crowd lenders

Stability refers to the persistence of the factors that lead to success or failure (Harvey et al., 2014) and is associated with expectations about whether these factors will recur in the future and whether they will lead to repeated (mis)success. Moreover, the link between stability and expectations evokes feelings of hope or hopelessness (Weiner, 1985). Attribution to non-recurring, unstable factors could foster hope for the future, potentially enhancing the perceived legitimacy of entrepreneurs after failure, which may positively influence investment decisions in crowdlending (Huang et al., 2022; Kibler et al., 2017; Weiner, 1985). Conversely, attribution

to stable factors may lead lenders to expect future failures, creating a sense of hopelessness regarding the venture's prospects (Kibler et al., 2017; Weiner, 1985). If the attribution conveys the impression that the failure factors will persist, lenders' confidence in the entrepreneurs' ability to achieve future success may be undermined (Kibler et al., 2017). Attribution to unstable factors, on the other hand, could reinforce expectations that future failures will not recur, potentially signalling a lower risk of failure compared to stable attributions (Weiner, 2018). This would positively impact investment willingness, as crowdlending investors carefully weigh risk and return (Hoegen et al., 2018; Slimane & Rousseau, 2020). Thus, we posit the following:

**Hypothesis 1c (H1c).** *Crowd lenders react more positively to unstable rather than stable failure attributions.*

#### **4.2.3.4 The moderating role of stability**

While the dimensions of attribution theory are conceptually distinct, the literature has also explored their interrelationships (Kibler et al., 2017; Walsh & Cunningham, 2017; Yamakawa et al., 2010). Existing research indicates that the stability of failure factors can influence reactions to attributions regarding the locus of causality and controllability (Homsma et al., 2007; Kibler et al., 2017). To prevent repeated failures, it is expected that entrepreneurs learn from their failures and leverage the knowledge gained in future entrepreneurial endeavours (Eggers & Song, 2015; Ucbasaran et al., 2013).

When failure is attributed to internal and controllable factors, it is typically seen as unstable, meaning entrepreneurs can adapt and avoid the same mistakes (Harvey et al., 2014; Schwarzer & Weiner, 1991; Walsh & Cunningham, 2017; Yamakawa et al., 2010). In contrast, stable attributions suggest that failure is likely to recur, contradicting lender

expectations that internal and controllable factors should lead to learning and improvement (Kibler et al., 2017; Weiner, 2018). This contradicts the implicit assumption of lenders that internal and controllable factors will not lead to repeated failures (Harvey et al., 2014; Yamakawa et al., 2010). If entrepreneurs claim to have learned from failure, stable attributions may undermine this perception (Eggers & Song, 2015; Ucbasaran et al., 2013), whereas unstable attributions reassure lenders that past mistakes will not be repeated, increasing confidence in future success. Such stable characteristics can also include individual-level traits such as emotion regulation, which represents a relatively persistent ability to manage affective responses (Fang He et al., 2018). Therefore, we hypothesise the following:

**Hypothesis 2 (H2).** *Stability moderates the relationship between (a) locus of causality and (b) controllability and investment willingness, strengthening the positive relationship between attributing failure to (a) internal or (b) controllable factors and investment willingness when failure is attributed to unstable rather than stable factors.*

#### **4.2.3.5 The moderating role of crowd lender's gender**

##### **4.2.3.5.1 Crowd lenders, gender and causality**

Nearly three decades ago, research identified gender as a crucial determinant of investment behaviour (Bajtelsmit & Bernasek, 1997). This influence may be partly explained by psychological and cognitive differences between men and women, which shape financial decision-making (Vismara et al., 2016). These differences become particularly significant in failure situations, as failure acts as a substantial risk signal, and risk tolerance varies by gender (Hervé et al., 2019). Extensive research suggests that women are more risk-averse than men (Deo & Sundar, 2015; Holden & Tilahun, 2022; Marinelli et al., 2017). This risk

aversion becomes even more pronounced in investment-based crowdfunding, such as equity and lending, where uncertainty is particularly high (Hervé et al., 2019; Mohammadi & Shafi, 2018). While women tend to be more optimistic overall (Holden & Tilahun, 2022), they exhibit a lower tolerance for uncertainty when making investment decisions (Deo & Sundar, 2015; Ren et al., 2025).

Recent research provides a more nuanced understanding of this gender difference in risk perceptions. Ren et al. (2025) demonstrate that women exhibit distinct patterns of brain activity that are associated with a stronger future-oriented and emotionally controlled approach to financial decision-making. Hence, they may prefer external attributions of failure in entrepreneurs, as these suggest that setbacks were due to situational factors and may not influence the new venture creation. In contrast, men, who tend to be less risk-averse (Ren et al., 2025), may interpret internal attributions as a sign of accountability and responsibility, aligning with their preference for structured, performance-based evaluations (Huang & Kisgen, 2013). Although internal attributions can be emotionally disruptive, they can also enhance learning and future success (Shepherd et al., 2016), which men may view as a positive indicator of an entrepreneur's resilience and potential.

Furthermore, depending on their own gender, lenders themselves bring personal experiences into their decision-making. On the one hand, prior research indicates that women themselves are more likely to attribute their own failures to internal factors, such as a lack of ability (Bandura, 1997; Rakowska & Rupert, 2024; Uebbing et al., 2025) and success to external factors, for example, luck, whereas men tend to do the opposite (Laguía et al., 2019; Ryckman & Peckham, 1987). Therefore, we believe that female crowd lenders are also aware of the potential consequences of this mindset. On the other hand, female lenders themselves

are more aware of potential external barriers and therefore do not perceive them as excuses, but rather as realistic factors that can cause failure. Hence, we hypothesise the following:

**Hypothesis 3a (H3a).** *The gender of crowd lenders moderates the relationship between causal attributions and investment willingness, such that female crowd lenders react more positively to external attributions of failure, whereas men respond more positively to internal attributions.*

#### 4.2.3.5.2 Crowd lenders, gender and controllability

Gender-based differences in emotional engagement and decision-making styles also shape investment decisions. Previous research indicates that women exhibit greater sympathy and relational considerations when evaluating investment opportunities (Eagly & Carli, 2003), while men tend to rely on more rational, non-emotional decision-making processes (Croson & Gneezy, 2009). As a result, women lenders may be particularly willing to support entrepreneurs who attribute failure to uncontrollable factors, perceiving them as victims of circumstance rather than fundamentally incompetent. In contrast, male lenders, prioritising rational assessment over emotional considerations, may prefer entrepreneurs who acknowledge personal responsibility for failure, which signals control and accountability.

However, previous research has indicated that female entrepreneurs are generally more likely to attribute failure to controllable factors, for example, 'I did not work hard enough' or 'I made the wrong decision' (Barrett & Bliss-Moreau, 2009), whereas men tend to attribute failure to uncontrollable factors, such as market conditions, external forces. While homophily suggests that lenders may be drawn to entrepreneurs with similar attribution styles (Butticè et al., 2023; Chen et al., 2023; Khurana & Lee, 2023; Wang & Prokop, 2025), heterophily in attributional reasoning may also shape investment decisions (Bellucci et al., 2025; Hao et al., 2024; Howell & Nanda, 2024). Lenders may prefer explanations of failure

that challenge their attribution tendencies, offering alternative perspectives that appear more insightful or strategic (Martinko et al., 2007). Other reasons could be the demonstration of their legitimacy (Xu et al., 2024) or females evaluating females more critically than their male counterparts (Voitkane et al., 2019). Female lenders, who typically attribute failure to internal and controllable causes, may find uncontrollable attributions particularly compelling, as these provide a less self-critical perspective and align with structural explanations of failure. Conversely, male lenders, who tend to externalise their failure, viewing it as driven by uncontrollable circumstances, may perceive controllable attributions as a sign of accountability and resilience. Moreover, male crowd lenders may be less influenced by whether entrepreneurs see their failure as controllable. Therefore, we hypothesise the following:

**Hypothesis 3b (H3b).** *The gender of crowd lenders moderates the relationship between controllability and investment willingness, such that female crowd lenders react more positively to uncontrollable attributions of failure, whereas men react more positively to controllable attributions.*

#### **4.2.3.5.3 Crowd lenders, gender and stability**

Men and women utilise distinct information-processing strategies when making decisions (Thaler, 2021), influencing their investment behaviour (Mittal & Vyas, 2009). Research suggests that, because lenders have limited information about the business, they have to rely on behavioural heuristics (Tomlinson, 2020). Importantly, reliance on such heuristics is not uniform across individuals: men are more likely to adopt heuristic-based, simplified decision-making approaches, focusing on singular, salient cues to guide their choices (Meyers-Levy & Maheswaran, 1991). In contrast, women process information more comprehensively, integrating explicit and subtle cues (Graham et al., 2002). Additionally,



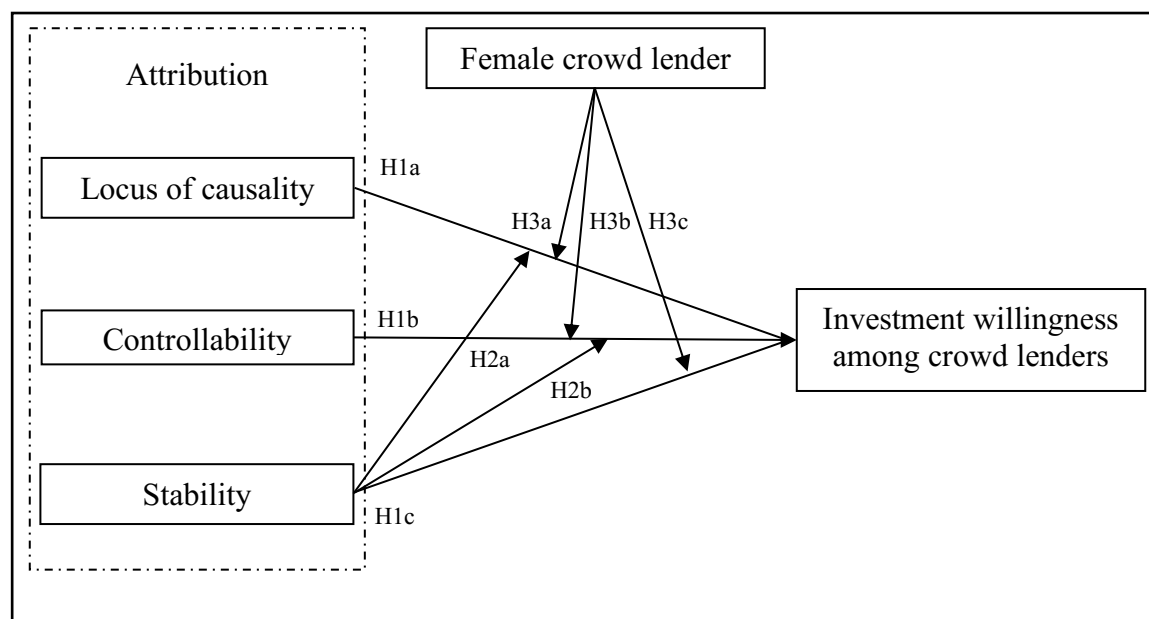
women tend to allocate more time to decision-making and seek more detailed information before making financial choices (Jamil & Khan, 2016). This becomes evident in Khurana and Lee's (2023) study, which concludes that although male lenders express positive evaluations of female entrepreneurs, they are ultimately less likely to reach a final deal with teams that include women. In contrast, female lenders do not display such a pattern. This suggests that male lenders tend to rely more heavily on a single evaluative cue, whereas female lenders may be less immediately convinced and instead seek additional information before making a final investment decision.

Beyond cognitive processing differences, gender also influences confidence levels in investment behaviour. Men investors typically exhibit higher overconfidence, leading to more aggressive financial decision-making, whereas women investors tend to be more cautious and deliberate (Huang & Kisgen, 2013). These differences suggest that men may prefer stable causes of failure, as they offer predictability and align with heuristic-based decision-making, allowing for quick assessments of risk and return. In contrast, women's preference for detailed evaluations and adaptability may lead them to favour unstable causes, as these allow for change, learning, and future improvement. Thus, we posit the following:

**Hypothesis 3c (H3c).** *The gender of crowd lenders moderates the relationship between stability and investment willingness, such that female crowd lenders react more positively to unstable attributions of failure, whereas men react more positively to stable attributions.*

**Figure 4-1** shows our conceptual model and all hypothesised relationships.

**Figure 4-1: Conceptual model (Essay III)**



*Note.* Female crowd lender: for this variable, male crowd lenders were the reference category.

## 4.3 Method

### 4.3.1 Research design

This study employs a metric-conjoint experiment to investigate how crowd lenders respond to failure attributions, precisely the dimensions of causality, controllability, and stability. In metric-conjoint experiments, participants make a series of decisions regarding different investment options (Warnick et al., 2018). This within-subject approach is suitable for our study because it enables us to explore investment choices depending on different profiles (Lohrke et al., 2010). In this regard, a metric-conjoint experiment mirrors the real-world decision environment of crowd lenders, who must simultaneously consider multiple pieces of information when making investment decisions. Hence, it is particularly well-suited to our study because it isolates the specific attributes of failure attributions, allowing us to assess how each dimension independently influences investment decisions. By systematically varying only the attribution-related factors while holding other contextual factors constant, we

can draw more precise conclusions about which attributions of failure affect lender willingness to fund ventures. The profiles used in this study are based on consistent decision attributes but differ in the combination of values assigned to these attributes (Shepherd & Zacharakis, 2018). Moreover, this approach manipulates decision attributes while keeping contextual factors constant (Schüler et al., 2024). To test our hypotheses, participants made investment decisions regarding different start-up profiles. These profiles varied in terms of the three dimensions of attribution theory used to describe prior failure and the venture's mission (i.e. sustainable vs. commercial). We considered the venture's mission to account for potential differences in failure attributions, but it was not a central focus of our analysis.

At the beginning of the experiment, participants received general information about the study's duration, procedure, and data protection policies. Providing consent to the data protection agreement was a prerequisite for further participation. Participants were then asked to imagine that they had saved money, which they now intended to invest in start-ups via a crowdlending platform. Before presenting the various investment options, the principle of crowdlending was explained to the participants to ensure they understood the opportunities and risks associated with this financing model.

Participants were also informed that all the options presented featured promising business ideas and plans, operating in industries with high market growth and profit margins. Furthermore, as they were in the crowdlending context, they were told that all start-ups promised a return of 7% over six years (Dinh & Wehner, 2022). Importantly, participants were informed that all entrepreneurs had previously started a failed business and had to cease operations. The introduction text of the study emphasised that the start-ups differed only in terms of their description of the previous failure and their venture mission. Participants were

instructed to carefully read the investment profiles and assess the likelihood of investing in each start-up separately.

Participants were presented with an excerpt from a fictional start-up profile on a crowdlending platform for each investment option. These profiles clearly outlined the venture's mission and included a question-and-answer section with the entrepreneurs regarding their previous failures (Zunino et al., 2022). **Table 4-1** summarises the attributes and their descriptions. Appendix C1 shows an example of the Q&A format presented in the experiment. Responses from the entrepreneur illustrated how they attributed the causes of their failure along the three dimensions of attribution theory. To prevent response biases due to the order of the investment profiles, their sequence was randomised for each participant (Schüler et al., 2024). Afterwards, participants answered additional demographic questions to capture control variables that could influence their decision-making.

The investment options were presented based on four criteria, each with two different levels. This resulted in a full factorial design with  $2^4 = 16$  possible profiles. Following the recommendations of prior research (Schüler et al., 2023; Warnick et al., 2018), a practice profile was included to help participants acclimate to the task. Additionally, all profiles were replicated to ensure the reliability and stability of response behaviour (Schüler et al., 2024; Shepherd & Zacharakis, 2018). Consequently, each participant made 33 decisions, with 32 being relevant for our analysis.

**Table 4-1: Conjoint attributes (Level 1)**

| Attribute          | Level          | Description                                                                                                                                                                   |
|--------------------|----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Locus of causality | Internal       | I miscalculated the costs. As an entrepreneur, I could no longer cover the costs with the revenue. I take full responsibility.                                                |
|                    | External       | External circumstances were to blame. Important customers were unable to pay their invoices. Due to the lost revenue, I, as an entrepreneur, could no longer cover the costs. |
| Controllability    | Controllable   | It was due to circumstances that could have been controlled. I should have focused more on cost calculation.                                                                  |
|                    | Uncontrollable | The circumstances were uncontrollable. The start-up operated in a highly competitive market under pressure from competitors.                                                  |
| Stability          | Unstable       | Such a failure will not happen to me again in similar situations.                                                                                                             |
|                    | Stable         | Such a failure happens and cannot be avoided in similar situations.                                                                                                           |
| Venture mission    | Sustainable    | It is a sustainable start-up. The mission of the start-up is to simultaneously achieve and balance social, ecological, and economic goals.                                    |
|                    | Commercial     | It is a profit-oriented start-up. The mission of the start-up is to achieve economic goals without pursuing additional social or ecological objectives.                       |

### 4.3.2 Implementation and manipulation checks

Several measures were implemented before and during the study to minimise potential biases in the research design and ensure high data quality (Podsakoff et al., 2012). First, to enhance the validity of failure attributions in the investment profiles, we developed them based on prior research (Küssbauer & Baum, 2020). Furthermore, using a question-and-answer format to present attributions is a common feature of crowdfunding platforms (Zunino et al., 2022) and may help participants immerse themselves in the investment scenario.

Before the main study began, a pre-test was conducted with eight participants to evaluate the clarity of the experiment. Based on the feedback, adjustments were made to the

study's description of the context to better immerse participants in the investment scenario. Moreover, the pre-test was conducted to assess the study's length (Karren & Barringer, 2002). Complex conjoint studies can lead to participant fatigue, declining motivation, and inattentive responses (Aiman-Smith et al., 2002; Huang et al., 2012). Thirty-two investment decisions (+ one practice profile) per participant is considered appropriate in research (Schüler et al., 2024). Furthermore, the pre-test participants found this number to be manageable.

Moreover, an attention-check item was included in the questionnaire to identify inattentive respondents: *'Please select "strongly agree"'* (Barber et al., 2013). Incorrect responses to this item led to the exclusion of the participant's data during cleaning. A realism check was also conducted (Maute & Dubés, 1999). Using two items on a 7-point Likert scale, participants were asked to rate how realistic they perceived the described situation to be (1: *not at all realistic* to 7: *very realistic*) and how well they could imagine themselves in that situation (1: *not at all* to 7: *very well*). Furthermore, another item on a 7-point Likert scale assessed how thoroughly participants had read the investment options (1: *not at all* to 7: *very thoroughly*). The mean scores indicate that participants found the situation to be reasonably realistic ( $M = 4.67$ ,  $SD = 1.31$ ), were able to imagine themselves in it relatively well ( $M = 4.60$ ,  $SD = 1.41$ ), and read the investment options with a fair degree of attention ( $M = 5.03$ ,  $SD = 0.98$ ). These findings suggest that participants could relate the experimental decisions to real-life decisions, a critical criterion for conjoint experiments (Shepherd & Zacharakis, 2018).

### 4.3.3 Sample

The data were collected during a two-week period at the beginning of July 2024. A total of 84 German participants started the survey, whom we recruited through social media platforms, including LinkedIn, Instagram, Facebook, and WhatsApp (i.e. a messenger app).

The data cleaning process revealed that three participants failed the attention check.

Additionally, a visual inspection of the data identified a response pattern in one participant's answers. Moreover, only participants who were at least 18 years old and legally competent to invest in stocks and similar asset classes at the start of the study were included in the data analysis. Consequently, six participants were excluded. After excluding incomplete responses, 78 valid cases remained, resulting in a response rate of 92.9%.

Our final sample consisted of 78 German participants, each of whom evaluated 32 investment profiles (following one practice profile), resulting in 2,496 individual decisions ( $78 \times 32$ ). While the number of participants may appear modest compared to survey-based research, this sample size is in line with established standards in metric-conjoint analysis. According to a systematic review of conjoint studies in entrepreneurship, sample sizes of 50 or more are considered acceptable (Schüler et al., 2024). Thus, our study adheres to widely accepted methodological norms in this research domain.

Our sample included 50% women, resulting in a balanced gender distribution. The average age was 31.99 years ( $SD = 7.28$ ), and participants reported an average of 9.23 years of work experience. Over half of the sample (55.13%) had prior nonprofessional investment experience, averaging 4.27 years. Five participants indicated that they had previously invested in crowdfunding projects, and 30.77% of the respondents reported having personal or professional relationships with individuals who had experienced entrepreneurial failure.

#### **4.3.4 Measures**

The dependent, independent, and control variables were operationalised as follows.

*Independent variables.* The variables were manipulated across four attributes based on the dimensions of attribution theory and the venture's mission. The failure attributions were adapted from validated descriptions developed by Küssbauer and Baum (2020). The

dimension of causality is distinguished between internal explanations: 'I miscalculated costs and take full responsibility' and external explanations: 'Key clients failed to pay their invoices'. Controllability refers to whether the failure was presented as controllable: 'I could have better managed costs' or uncontrollable: 'The venture faced strong market competition'. Stability is differentiated between unstable attributions: 'This failure will not happen again' and stable attributions: 'This failure is unavoidable in similar situations'. Finally, the venture mission was described as either sustainable, emphasising environmental, social, and economic or commercial goals, focusing exclusively on financial objectives.

*Dependent variable.* The willingness to invest was measured using a single-item scale. Participants rated their likelihood of investing in each start-up profile on a 7-point Likert scale, following established measures in prior research on investment decisions (Warnick et al., 2018).

*Moderation variable.* To identify patterns among women and men crowd lenders, we used the demographic variable of gender, which was coded with 1 for women and 0 for men.

*Control variables.* Several control variables were included to account for individual factors that might influence investment decisions. Investment experience was measured in years following previous research on investor behaviour in crowdfunding contexts (Penz et al., 2022). Willingness to take risks was measured with two items using a 7-point Likert scale, such as 'Are you generally a risk-tolerant person?', based on validated scales (Menkhoff & Sakha, 2016), with a Cronbach's  $\alpha$  of .81. Perspective taking, or the ability to adopt another person's psychological viewpoint, was measured using four items adapted from Davis (1980), demonstrating strong internal consistency (Cronbach's  $\alpha = .87$ ). One example item included the following: 'Before criticising somebody, I try to imagine how I would feel if I were in their place'. Lastly, familiarity with entrepreneurial failure was measured dichotomously,



asking whether participants had personal or professional relationships with someone who had experienced business failure (Kibler et al., 2017). Please see Appendix C2 for an overview of the relevant measures for the study.

#### **4.3.5 Analytical approach**

The data included 2,496 observations, as each of the 78 participants evaluated 32 investment profiles and completed one practice profile ( $78 \times 32$ ). A multilevel modelling approach, specifically hierarchical linear modelling, was employed to analyse the data, accounting for the nested structure, in which multiple investment decisions (Level 1) are nested within participants (Level 2). This method estimates within-participant and between-participant effects while controlling for individual differences (Lohrke et al., 2010). Before the analysis, the data were cleaned to ensure consistency. Multicollinearity among the independent variables was examined using variance inflation factors (*VIFs*), all of which were well below the threshold of 2 (Cohen et al., 2002). Reliability was assessed using intra-class correlation coefficients (*ICCs*), which averaged 0.76 across replicated profiles, indicating stable responses (Schüler et al., 2024). The ICC represents the proportion of variance in the dependent variable attributable to the grouping structure of the data (Hox, 2002).

The analysis was conducted stepwise. First, a null model was estimated to verify whether there was a significant variance in investment likelihood across participants. Second, the independent variables were included as fixed effects at Level 1. Interaction terms were added to test the moderating effect of stability. Finally, control variables, including investment experience, risk tolerance, perspective taking, and familiarity with entrepreneurial failure, were added at Level 2. Cluster-robust standard errors were used to account for

correlations between responses among participants.<sup>8</sup> Moreover, we conducted an additional analysis that incorporated the venture's mission, which, although not the primary focus of our study, was considered a relevant attribute. To examine ventures mission potential influence, we conducted an additional analysis to test its effects and explore its moderating role in the relationship between the independent variables.

#### 4.4 Results

**Table 4-2** presents the descriptive statistics, correlations, *VIFs*, and Cronbach's  $\alpha$  for the Level-2 variables. Due to the orthogonal study design, the correlations between Level-1 variables as well as their correlations with Level-2 variables are zero and, therefore, not reported.

**Table 4-2: Descriptive statistics, correlations, reliabilities, and *VIFs* (Level 2)**

| Variable                    | <i>M</i> | <i>SD</i> | <i>VIF</i> | 1      | 2   | 3     | 4    | 5     |
|-----------------------------|----------|-----------|------------|--------|-----|-------|------|-------|
| 1 Female crowd lender       | 0.50     | 0.50      | 1.33       |        |     |       |      |       |
| 2 Investment experience     | 4.27     | 7.73      | 1.04       | -.14   |     |       |      |       |
| 3 Willingness to take risks | 3.59     | 1.28      | 1.04       | -.49** | .20 | (.81) |      |       |
| 4 Failure knowledge         | 0.31     | 0.46      | 1.39       | -.06   | .02 | .17   |      |       |
| 5 Perspective taking        | 5.12     | 0.91      | 1.01       | -.04   | .01 | .05   | -.08 | (.87) |

*Note.*  $N = 78$ ;  $M$  = mean;  $SD$  = standard deviation;  $VIF$  = variance inflation factor; female crowd lender (1: female; 0: male); \*\*  $p < .01$ . The reliability coefficients (Cronbach's  $\alpha$ ) are shown in brackets on the diagonal.

##### 4.4.1 Primary results

The multilevel analysis began with the specification of a null model (Aguinis et al., 2013), which included a random intercept for participants. An ICC of .12 indicates that individual differences among participants explain 12% of the variance in investment willingness. This finding justifies the use of multilevel analysis to model the relationships and test the hypotheses (Hayes, 2006). Building on the null model, Level-1 variables were added

<sup>8</sup> To ensure the robustness of results, multiple diagnostic tests were conducted. Test-retest reliability was examined by comparing regression coefficients from separate analyses of the replicated profiles, with no significant differences observed. These steps ensured that the findings were valid, reliable, and robust for hypothesis testing.

as fixed effects in Model 1. The multilevel models are summarised in **Table 4-3**. The  $\chi^2$  test indicates that adding these variables significantly improves the explained variance of the dependent variable compared to the null model ( $\chi^2 = 210.03, p < .001$ ). The marginal pseudo- $R^2$  is 7.07%, demonstrating that the manipulated Level-1 variables contribute to explaining investment willingness.

Table 4-3: Multilevel model

| Variables                          | Dependent variable: willingness to invest |     |     |         |     |     |         |     |     |         |     |     |
|------------------------------------|-------------------------------------------|-----|-----|---------|-----|-----|---------|-----|-----|---------|-----|-----|
|                                    | Model 1                                   |     |     | Model 2 |     |     | Model 3 |     |     | Model 4 |     |     |
|                                    | H1a-H1c                                   |     |     | H1a-H1c |     |     | H2a     |     |     | H2b     |     |     |
|                                    | $\beta$                                   | SE  | p   | $\beta$ | SE  | p   | $\beta$ | SE  | p   | $\beta$ | SE  | p   |
| <i>Level-1 Variables</i>           |                                           |     |     |         |     |     |         |     |     |         |     |     |
| Internal                           | .09                                       | .05 | †   | .09     | .05 | †   | -.02    | .08 |     | .09     | .05 | †   |
| Controllable                       | .21                                       | .05 | *** | .21     | .05 | *** | .21     | .05 | *** | -.08    | .07 |     |
| Unstable                           | .68                                       | .05 | *** | .68     | .05 | *** | .57     | .08 | *** | .39     | .07 | *** |
| Sustainable mission                | .31                                       | .05 | *** | .31     | .05 | *** | .31     | .05 | *** | .31     | .05 | *** |
| <i>Level-1 Interactions</i>        |                                           |     |     |         |     |     |         |     |     |         |     |     |
| Internal * Unstable                |                                           |     |     |         |     |     | .21     | .11 | *   |         |     |     |
| Controllable * Unstable            |                                           |     |     |         |     |     |         |     |     | .58     | .11 | *** |
| <i>Level-2 Interactions</i>        |                                           |     |     |         |     |     |         |     |     |         |     |     |
| Internal * Female crowd lender     |                                           |     |     |         |     |     |         |     |     | -.46    | .11 | *** |
| Controllable * Female crowd lender |                                           |     |     |         |     |     |         |     |     |         |     |     |
| Unstable * Female crowd lender     |                                           |     |     |         |     |     |         |     |     | -.18    | .11 | †   |
| <i>Control Variables (Level 2)</i> |                                           |     |     |         |     |     |         |     |     |         |     |     |
| Female crowd lender                | .28                                       | .13 | *   | .28     | .13 | *   | .28     | .13 | *   | .28     | .13 | *   |
| Investment experience              | .02                                       | .01 | **  | .02     | .01 | **  | .02     | .01 | **  | .02     | .01 | *   |
| Willingness to take risks          | .06                                       | .05 |     | .06     | .05 |     | .06     | .05 |     | .06     | .05 |     |
| Failure knowledge                  | -.33                                      | .13 | *   | -.33    | .13 | *   | -.33    | .13 | *   | -.33    | .13 | *   |
| Perspective taking                 | -.12                                      | .06 | †   | -.12    | .06 | †   | -.12    | .06 | †   | -.12    | .07 | *   |
| Constant                           | 3.03                                      | .08 | *** | 3.29    | .40 | *** | 3.35    | .40 | *** | 3.44    | .40 | *** |
| <i>Variance components</i>         |                                           |     |     |         |     |     |         |     |     |         |     |     |
| Residual variance                  | 1.74                                      | .05 | *** | 1.74    | .05 | *** | 1.74    | .05 | *** | 1.72    | .05 | *** |
| Variance of the constant           | .27                                       | .05 | *** | .20     | .04 | *** | .20     | .04 | *** | .20     | .04 | *** |

Note. A total of 2,496 observations nested in  $N = 78$ ; ICC (null model) = .12; maximum likelihood estimation; random intercept fixed slope models;  $\beta$  = unstandardised coefficient; SE = standard error;  $p$  = p-value; significance †  $p < .10$ , \*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ ; locus of causality (1: internal, 0: external); controllability (1: controllable; 0: uncontrollable); stability (1: unstable; 0: stable); female crowd lender (1: woman; 0: man); failure knowledge (1: private/professional relationship with entrepreneur with past failure; 0: no private/professional relationship with an entrepreneur with past failure); mission (1: sustainable; 0: commercial).

Models 1 and 2 test hypotheses H1a, H1b, and H1c. The results show that internal attributions, compared to external ones, have a weakly significant positive effect on investment willingness ( $\beta = .09, p = .09, CI^{95}[-.02; .19]$ ), confirming Hypothesis 1a. Furthermore, crowd lenders react more positively, indicated by their higher investment willingness, when entrepreneurs attribute failure to controllable rather than uncontrollable factors ( $\beta = .21, p < .001, CI^{95} [.11; .31]$ ), confirming Hypothesis 1b. Hypothesis 1c is also supported, as attributing failure to unstable rather than stable factors has a significant positive effect ( $\beta = .68, p < .001, CI^{95} [.58; .78]$ ).

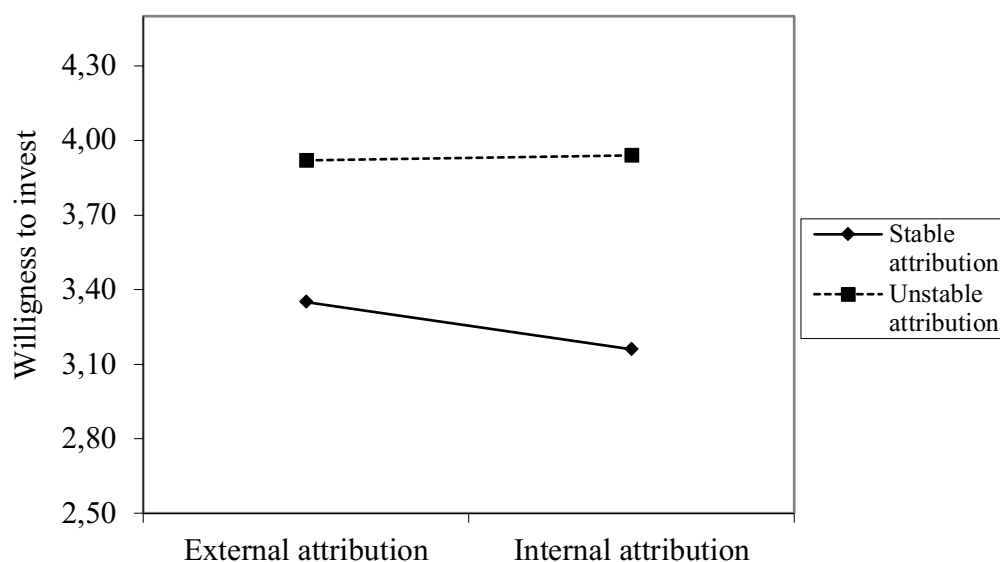
Five models were specified to test Hypotheses 2a, 2b, 3a, 3b, and 3c, building on Model 2 by including the relevant interaction terms. The interaction of Model 3 between causality and stability is significant and positive ( $\beta = .21, p = .04, CI^{95} [.01; .42]$ ). The visual representation in **Figure 4-2** illustrates that the relationship between causality and investment willingness is influenced by attribution stability; therefore, Hypothesis 2a is confirmed.

Model 4 tests Hypothesis 2b and reveals a significant positive interaction effect ( $\beta = .58, p < .001, CI^{95} [.38; .79]$ ) between stability and controllability. **Figure 4-3** shows that the relationship between controllability and investment willingness is more positive when failure is attributed to unstable rather than stable factors. An unstable attribution leads to a positive relationship, whereas a stable attribution reverses the effect to a negative relationship; thus, Hypothesis 2b is supported.

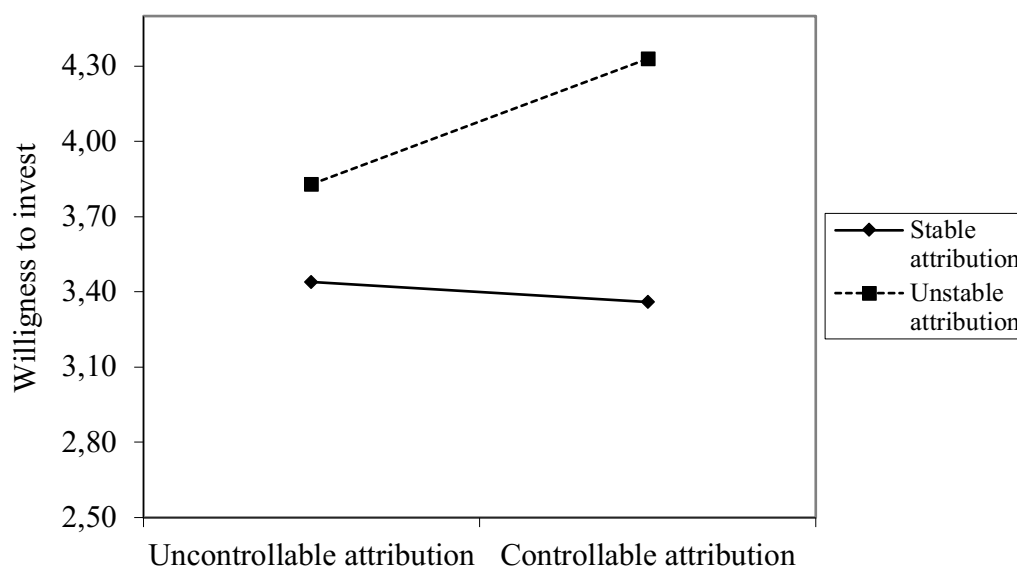
Models 5–7 test the moderation hypotheses regarding the gender of crowd lenders. Therefore, we interact with Level-1 and Level-2 variables, revealing significant results for the interaction between the gender of the crowd lender and attributions. The analysis showed a significant interaction between attribution type causality (internal vs. external) and lender gender ( $\beta = -.46, p < .001, CI^{95} [-.67; -.25]$ ), supporting Hypothesis 3a. Specifically, female

lenders evaluated internal attributions of failure less favourably than men lenders. The negative coefficient suggests that while internal attributions might generally increase willingness to invest, this effect is moderated by investor gender, with female lenders showing a more critical response (**Figure 4-4**). Moreover, regarding the attribution type controllability (controllable vs. uncontrollable), we find a weak yet significant effect ( $\beta = -.18, p = .09, CI^{95} [-.38; .03]$ ), which supports Hypothesis 3b (**Figure 4-5**). In contrast, no significant interaction was found between lenders' gender and stability ( $\beta = -.01, p = .92, CI^{95} [-.22; .20]$ ), leading to the rejection of H3c. **Table 4-4** provides an overview of all hypotheses.

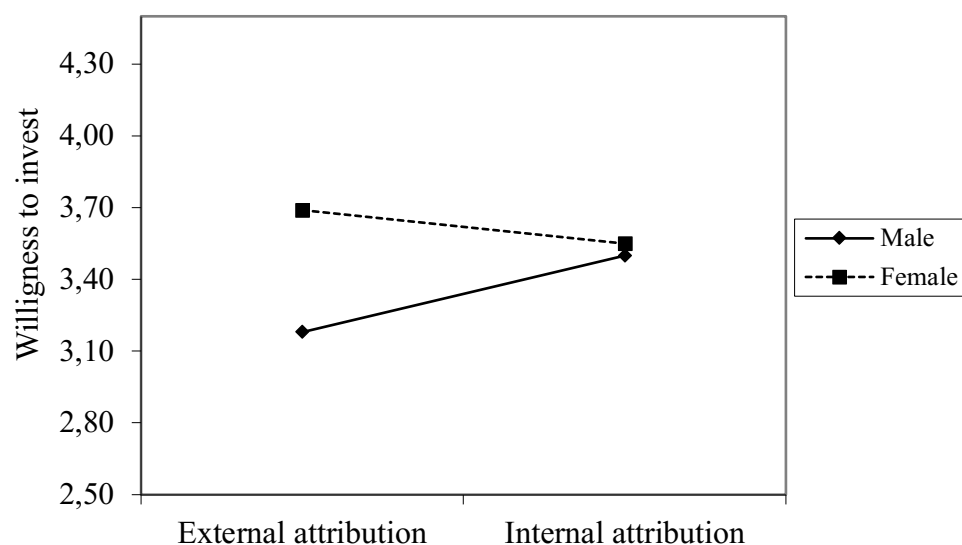
**Figure 4-2: Moderation – locus of causality  $\times$  stability**



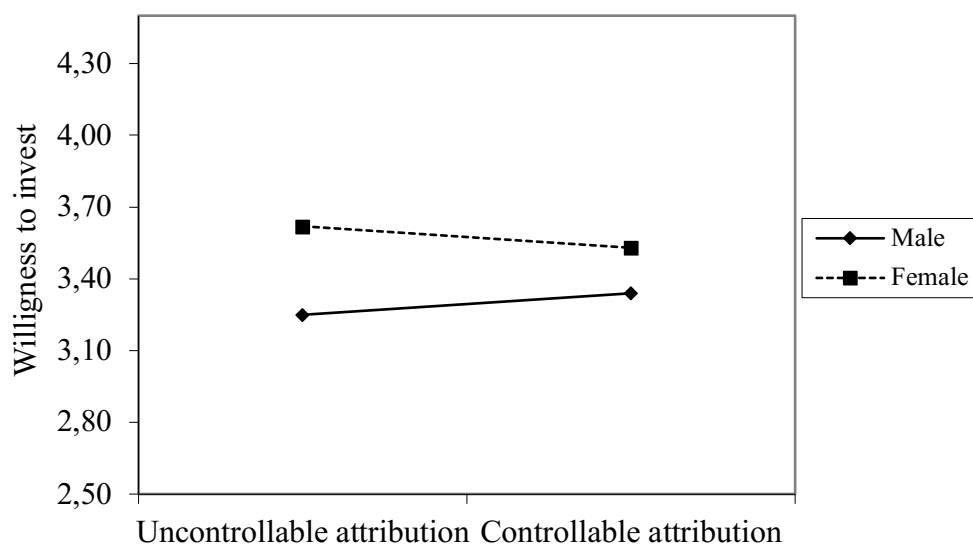
**Figure 4-3: Moderation – controllability  $\times$  stability**



**Figure 4-4: Moderation – locus of causality × female crowd lender**



**Figure 4-5: Moderation – controllability × female crowd lender**



**Table 4-4: Overview of hypotheses**

|     | <b>Hypothesis</b>                                                                                                                                            | <b>Accepted/rejected</b> | <b>Statistical values</b>                                   |
|-----|--------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|-------------------------------------------------------------|
| H1a | <i>Crowd lenders react more positively to internal than external attributions of failure.</i>                                                                | Accepted                 | $\beta = .09, p = .09$ ,<br>CI <sup>95</sup> [-.02; .19]    |
| H1b | <i>Crowd lenders react more positively to controllable rather than uncontrollable failure attributions.</i>                                                  | Accepted                 | $\beta = .21, p < .001$ ,<br>CI <sup>95</sup> [.11; .31]    |
| H1c | <i>Crowd lenders react more positively to unstable rather than stable failure attributions.</i>                                                              | Accepted                 | $\beta = .68, p < .001$ ,<br>CI <sup>95</sup> [.58; .78]    |
| H2a | <i>Stability moderates the relationship between locus of causality and investment willingness.</i>                                                           | Accepted                 | $\beta = .21, p = .04$ ,<br>CI <sup>95</sup> [.01; .42]     |
| H2b | <i>Stability moderates the relationship between controllability and investment willingness.</i>                                                              | Accepted                 | $\beta = .58, p < .001$ ,<br>CI <sup>95</sup> [.38; .79]    |
| H3a | <i>Female crowd lenders react more positively to external attributions of failure, whereas men respond more positively to internal attributions.</i>         | Accepted                 | $\beta = -.46, p < .001$ ,<br>CI <sup>95</sup> [-.67; -.25] |
| H3b | <i>Female crowd lenders react more positively to uncontrollable attributions of failure, whereas men react more positively to controllable attributions.</i> | Accepted                 | $\beta = -.18, p = .09$ ,<br>CI <sup>95</sup> [-.38; .03]   |
| H3c | <i>Female crowd lenders react more positively to unstable attributions of failure, whereas men react more positively to stable attributions.</i>             | Rejected                 | $\beta = -.01, p = .92$ ,<br>CI <sup>95</sup> = [-.22; .20] |

#### 4.4.2 Additional results

We conducted additional analyses on the attribution interactions, focusing on the venture mission and its moderating influence on the relationship between causality, controllability, stability, and investment willingness. First, our results indicate a positive effect of a sustainable mission on investment willingness ( $\beta = .32, p < .001$ , CI<sup>95</sup> [.21; .42]). Second, our moderating results concerning the attributions of failures and a sustainable mission show no significant interaction effects for either relationship (causality:  $\beta = -.02$ ,



$p = .87$ ,  $CI^{95}[-.23; .19]$ ; controllability:  $\beta = .00$ ,  $p = .99$ ,  $CI^{95}[-.21; .21]$ ; stability:  $\beta = .05$ ,  $p = .66$ ,  $CI^{95}[-.16; .25]$ ; see Appendix C3).

## 4.5 Discussion

This study aimed to answer the following two research questions: *How do crowd lenders react to distinct failure attributions of entrepreneurs? How does the gender of crowd lenders impact their reactions to an entrepreneur's attribution of failure?* Our results demonstrate that failure attributions significantly impact crowd lender decision-making and investment willingness. Specifically, attributions to internal rather than external factors, controllable rather than uncontrollable factors, and unstable rather than stable factors each have a positive impact on crowd lender investment willingness. Additionally, we found that attributions to internal or controllable factors are more positively associated with investment willingness when the causes are framed as unstable rather than stable. A positive relationship exists between internal or controllable attributions and investment willingness in cases where explanations are unstable, whereas the relationship becomes negative when causes are attributed to stable factors. Moreover, by identifying boundary conditions, such as stability and the gender of the crowd lender, we highlight distinct patterns in failure attribution that are particularly relevant for female crowd lenders, primarily reflecting their responses to external and uncontrollable failure attributions.

### 4.5.1 Third-party reactions to failure attributions

With this, our study advances the literature on entrepreneurial finance (Cope, 2011; Roccapiore et al., 2021; Souakri et al., 2023) and, more specifically, the crowdlending literature focusing on failure (Lindlar et al., 2025), by shifting the analytical focus toward third-party reactions (Bai and Gao, 2023; Roccapiore et al., 2021; Souakri et al., 2023) and emphasising the relevance of failure attributions as an observable cue in early-stage funding

decisions. Building on prior work that has established the ambivalent nature of failure perceptions among crowd lenders, we present the mechanisms through which responses to failure may elicit positive investor behaviour (Bai & Gao, 2023; McSweeney et al., 2025).

Our findings show that attributional framing significantly influences lender willingness to invest, thereby extending existing evidence (Kibler et al., 2021; Roccapiore et al., 2021) that failure narratives can shape future resource acquisition. Specifically, our results reveal that crowd lenders favour internal over external attributions, thereby adding to the findings of Zunino et al. (2022), who highlight the importance of demonstrating learning competencies to positively influence investor reactions. We align with this view by showing that internal attributions are often interpreted as indicators of learning and accountability, which in turn enhance perceived credibility and positively affect investment intentions.

Moreover, our results demonstrate that both internal and controllable attributions, signals of responsibility acceptance (Kibler et al., 2017; Tsiros et al., 2004), positively affect willingness to invest. This supports arguments in the literature that the denial of responsibility can lead to unfavourable evaluations of entrepreneurs (Cardon et al., 2011; Kibler et al., 2021). At the same time, our findings initially appear to contradict those of Kibler et al. (2017), which suggest that external and uncontrollable attributions may be strategically beneficial for preserving professional legitimacy. This apparent contradiction underscores the importance of attributional framing as a nuanced signal, particularly in the context of crowdlending, where investor interpretation may differ from traditional investor settings.

Furthermore, the moderating effect of stability on the relationship between locus of causality or controllability and willingness to invest supports prior findings in both failure and attribution research (Homsma et al., 2007; Kibler et al., 2017). Specifically, the positive impact of internal or controllable attributions on investment intentions is amplified when

these attributions are unstable, but it is attenuated, or even reversed, when they are stable.

While internal and controllable causes are generally perceived as modifiable and thus unstable (Harvey et al., 2014; Walsh & Cunningham, 2017; Yamakawa & Cardon, 2015), attributing failure to stable factors may signal persistent deficiencies, raising concerns about repeated failure and undermining lender confidence (Harvey et al., 2014; Hochberg et al., 2014; Zunino et al., 2022).

#### **4.5.2 Gendered reactions to failure attributions**

Our study contributes to the entrepreneurship literature on gender and investment behaviour (Bapna & Ganco, 2021; Harrison et al., 2020), which has shown that ‘gender differences stem from a complex combination of mechanisms’ (Koziol et al., 2025, p. 231). We identify failure attribution as one such mechanism that shapes lender evaluations of entrepreneurs. Specifically, our findings show that female lenders respond more positively when prior entrepreneurial failure is attributed to external factors, whereas male lenders react more favourably when the failure is attributed to internal factors.

This pattern can be understood through the lens of risk perception. External attributions frame the failure as the result of temporary, situational factors, such as adverse market conditions, rather than persistent weaknesses of the entrepreneur. For female lenders, who have been shown to exhibit lower risk tolerance, particularly in uncertain contexts like investment-based crowdfunding (Hervé et al., 2019; Mohammadi & Shafi, 2018), external attributions reduce the perceived downside risk of investing. In contrast, male lenders appear to interpret internal attributions, where entrepreneurs take responsibility for past failures, as a sign of accountability and learning (Shepherd et al., 2016). This signals to them that the entrepreneur has grown from the experience and is therefore better equipped to succeed in the future. By identifying these gender-specific reactions, our study offers a more nuanced

explanation for the well-documented finding that female lenders tend to be more risk-averse than their male counterparts (Deo & Sundar, 2015; Holden & Tilahun, 2022; Marinelli et al., 2017; Ren et al., 2025). More specifically, our results suggest that part of this difference may stem from women's preference for external attributions, which present investment opportunities as less inherently risky. This insight extends existing research by highlighting how subtle framing cues, such as how failure is explained, can differentially influence the decisions of male and female lenders.

Female lenders also responded more favourably to uncontrollable attributions of failure, while male lenders reacted more positively to controllable attributions. Although modest in size, this result adds nuance to prior evidence on gendered decision-making and attributional reasoning in entrepreneurial finance. Women's preference for uncontrollable attributions aligns with research showing that they tend to engage more relationally and empathetically in decision-making (Eagly & Carli, 2003), sympathising with entrepreneurs who are portrayed as victims of circumstance rather than inherently flawed. In contrast, men's preference for controllable attributions reflects a rational, performance-based perspective (Croson & Gneezy, 2009), where accountability and evidence of learning signal resilience and future success (Shepherd et al., 2016).

These results challenge traditional homophily explanations (Greenberg & Mollick, 2017), which predict alignment with one's own attribution style (Butticè et al., 2023; Chen et al., 2023; Wang & Prokop, 2025). Instead, our findings point toward heterophily, suggesting that lenders may value perspectives that complement rather than mirror their own (Martinko et al., 2007) – aligning with more recent studies (Bellucci et al., 2025; Hao et al., 2024; Howell & Nanda, 2024; Xu et al., 2024). Female lenders, who often internalise controllable causes for failure (Barrett & Bliss-Moreau, 2009), may perceive uncontrollable attributions as

offering a more balanced and less self-critical narrative. Conversely, male lenders, who tend to externalise their own failures, may interpret controllable attributions as a rare but credible signal of accountability and legitimacy. Instead, our findings align more closely with attribution theory, which suggests that failures attributed to uncontrollable causes elicit sympathy, while those attributed to controllable factors provoke frustration or blame (Graham, 1991). Given that women tend to exhibit higher levels of empathy and emotional engagement in investment decisions (Eagly & Carli, 2003), their preference for entrepreneurs who attribute failure to uncontrollable causes may stem from a greater propensity to perceive such individuals as victims of circumstance rather than as fundamentally incompetent.

Contrary to our expectations, we found no significant interaction between the stability of failure attribution and lender gender, which suggests that, unlike causality and controllability, the stability dimension of attribution may be less influential in shaping lenders' investment willingness in terms of gender moderation. One possible explanation is that stability cues are less salient for investors in the context of crowdlending, where decision-making often occurs with limited information (Tomlinson, 2020). Whereas women tend to process information more comprehensively (Graham et al., 2002) and men rely more on heuristic cues (Meyers-Levy & Maheswaran, 1991), these differences may not have been triggered strongly enough by the stability framing in our scenarios.

#### **4.5.3 Theoretical implications**

Overall, our findings contribute to attribution theory (Weiner, 1985) by extending its application into the domain of entrepreneurial finance, specifically within the context of crowdlending. More specifically, our findings demonstrate that the core dimensions of attribution in salient and influential high-uncertainty investment environments are characterised by minimal information and high heterogeneity among decision-makers. By

showing that internal, unstable, and controllable attributions elicit more favourable responses from crowd lenders, we offer empirical validation of attributional reasoning in a novel context where attributions serve as strategic signals. Building on this foundation, our study advances attribution theory in the following ways.

First, we extend attribution theory by shifting the focus from actor's self-explanations to third-party observers in financial decision-making contexts and by conceptualising attribution as a two-sided process (Geiger, 2024). Failure attribution by entrepreneurs act as investment signals that directly shape crowd lender resource allocation decisions, thereby broadening the scope of attribution theory into entrepreneurial finance. Second, our findings underscore the boundary role of stability. While locus of causality and controllability are generally associated with positive evaluations, we show that these effects hold only when causes are framed as unstable. Attributing failure to stable internal or controllable factors instead reduces investment willingness, as it signals enduring incompetence. This highlights the critical role of stability in high-risk decision contexts. Third, we reveal that attributional effects are not uniformly interpreted but are moderated by the gender of the observer, thereby contributing to a more nuanced understanding of attribution theory by integrating gender as a boundary condition. This nuanced extension underscores that attribution processes are shaped not only by the characteristics of the actor (entrepreneur) but also by the cognitive and demographic traits of the observer (lender), thereby expanding the scope of attribution theory in entrepreneurial decision-making contexts.

#### **4.5.4 Practical implications**

Beyond its theoretical contributions, this study provides several implications for entrepreneurs, investors, managers, policy makers, and crowdlending platforms.

Entrepreneurs seeking funding on crowdlending platforms should recognise that explanations

of past failures serve as a critical investment signal. While internal, controllable, and unstable attributions generally increase investment willingness, this effect is not uniform across all lenders. Women lenders are more critical of internal attributions, whereas men lenders respond more favourably to them. Accordingly, entrepreneurs may consider tailoring their narratives to the likely composition of their potential lender base. For female audiences, entrepreneurs could emphasise uncontrollable external factors alongside resilience and learning; for male audiences, they could transparently acknowledge controllable shortcomings and corrective actions. However, such tailoring must remain authentic and consistent, as mismatches between words and actions may damage trust (Wang et al., 2022). Entrepreneurs should also present concrete evidence of post-failure learning, such as process improvements, team strengthening, or strategic pivots, to reinforce the signal value of their attribution (Walsh & Cunningham, 2017).

For crowd lenders, understanding the systematic influence of attribution framing can enhance decision quality. Being aware of potential biases, such as discounting viable ventures based on attribution style, may help lenders avoid missed investment opportunities. Lenders could adopt structured decision-making approaches, including pre-defined evaluation criteria or checklists that weigh attribution content alongside other venture fundamentals, such as repayment capacity or sector trends. This can help mitigate overreliance on heuristic judgements triggered by attribution framing. Furthermore, recognising gender-related tendencies in one's own judgements can reduce the risk of systematically favouring or disfavouring particular entrepreneur profiles.

At the organisational level, our findings suggest that attribution framing is not only relevant in external investor–entrepreneur interactions but also within founding teams and established organisations. Team members may interpret the same attribution of failure

differently, depending on their cognitive and gender-related tendencies. By acknowledging these differences, teams can create an environment where diverse interpretations are openly discussed, thereby reducing the risk of biased judgements. Such awareness can ultimately strengthen organisational resilience by ensuring that failures are constructively analysed and that learning is shared across heterogeneous teams. Nevertheless, whether these differences in attribution processing translate into effects within organisational teams requires further empirical investigation.

Moreover, for policymakers and platform designers, our results highlight that failure explanations matter. Therefore, platforms could introduce standardised sections for failure explanations, encourage transparent narratives of corrective actions, or guide effective framing strategies. Moreover, platforms can leverage these insights to diversify their investor base, attract more female lenders, and build trust by normalising diverse approaches to risk evaluation. At the policy level, recognising women's strengths in financial decision-making supports initiatives that promote gender diversity in investment ecosystems and leadership positions, ultimately fostering more balanced and resilient funding environments.

#### **4.5.5 Limitations and future research**

Despite its important theoretical and practical contributions, this study has limitations that should be addressed in future research. First, we employed a conjoint experiment using hypothetical investment scenarios to isolate and test the effects of specific attributional cues on investment decisions. While this method enhances internal validity and allows for controlled hypothesis testing (Aiman-Smith et al., 2002; Huang et al., 2012), it does not fully replicate the complexity of real-world crowdlending decisions, where lenders typically have access to a broader set of information (Messeni Petruzzelli et al., 2019). Moreover, although prior research suggests that decisions in hypothetical scenarios often mirror those in actual



contexts (Kühberger et al., 2002), future studies should aim to validate our findings, considering additional criteria relevant for lender decisions and using behavioural data from real crowdlending platforms to enhance external validity. Our experiment also assessed preferences for attributional frames, but did not measure the actual investment amounts participants would allocate. Investigating how attributional framing affects both investment likelihood and the financial volume of support would offer valuable insights (Khurana & Lee, 2023). Additionally, although a pre-test was conducted to refine the materials and ensure clarity, the small sample size ( $n = 8$ ) limits the confidence with which we can generalise its outcomes, pointing to the need for more extensive pilot testing in future studies.

Second, we potentially face the limitation of the generalisability of our results due to using a German sample. Perceptions of failure as well as attitudes toward entrepreneurial failure and failed entrepreneurs may vary across regions and cultures (Cardon et al., 2011; Kuckertz et al., 2020; Lewis et al., 2010). Research using German samples is considered representative of Western countries with low entrepreneurial activity (Kuckertz et al., 2020) and serves as a reference point for crowdlending research in other European countries (Dinh & Wehner, 2022; Hörisch & Tenner, 2020). Nevertheless, integrating more diverse national and regional contexts into future research offers the potential to gain a more nuanced understanding of these relationships across cultures and regions. Moreover, we built upon previous research by focusing on participants with general prior investment experience (Dinh & Wehner, 2022; Penz et al., 2022). However, recent studies suggest behavioural differences exist among individuals with prior crowdfunding experience (Bapna & Ganco, 2021; Lindlar et al., 2025). Therefore, future research should validate our findings using a sample of experienced crowd lenders.

Third, our study focuses on crowdfunding, especially crowdlending. Prior research has shown that responses to entrepreneurial failure may vary depending on the financing context (Oo et al., 2025; Roccapiore et al., 2021; Souakri et al., 2023; Zunino et al., 2022). Hence, future studies could explore reactions to failure attributions in the context of other crowdfunding types or alternative financing options to build a comprehensive view of how entrepreneurs should communicate their prior failures to supporters.

Fourth, our study examined the role of a sustainable mission in failure attribution, but we found no significant differences between commercial and sustainable ventures. We encourage future research to explore this intersection further, as deeper factors may be at play. This is particularly relevant given that previous research identified differing reactions to failure in sustainable ventures compared to commercial ones (Hornuf et al., 2021; Lindlar et al., 2025).

Fifth, as one of the first studies to examine crowd lender preferences for failure attributions based on gender, our work opens several avenues for future research. For example, we did not find a significant effect for Hypothesis 3c, which proposed that women respond more positively to stable attributions. This suggests that stability may be less salient in our context. Future studies could replicate our design in different settings to test whether alternative contexts yield different results.

## **4.6 Conclusion**

Our study examined how crowd lenders react to distinct entrepreneurial failure attributions and how lender gender shapes these reactions. In response to our research question, the results demonstrate that internal, controllable, and unstable attributions significantly increase willingness to invest. However, the effectiveness of these attribution types is shaped by key interactions among the attribution dimensions. Importantly, gender

differences emerged: Women lenders were generally less receptive than men to internal and, to a lesser extent, controllable attributions. These findings underscore the need to account for both the content of failure explanations and the observer characteristics when examining lender reactions in the context of failure. By applying attribution theory to the domain of crowdlending, our study shifts attention from self-responses by entrepreneurs to stakeholder evaluations, offering a new perspective on how failure narratives influence decisions.

## **5. Understanding failure in social entrepreneurship – A critical analysis and research agenda (Essay IV)**

### **Abstract**

Social ventures that address pressing social and environmental challenges are prone to higher rates of failure. However, failure in this context remains poorly understood as extant literature is shaped by success-oriented narratives. The fragmented nature of this emerging field of research has limited conceptual clarity and theoretical development. Drawing on a critical review of 40 peer-reviewed studies, we synthesize dispersed insights and develop a framework that organizes research opportunities across three stages of failure: pre-failure, within-failure, and post-failure. Central to this framework is a novel conceptualization of non-economic failure and its interaction with economic failure. Building on this foundation, we identify four research avenues: (1) emotional and identity-based antecedents, (2) divergent stakeholder perceptions, (3) consequences for beneficiaries and communities, and (4) societal, organizational, and individual engagement with failure. This agenda provides a structured basis for cumulative, multilevel theorizing on failure in mission-driven entrepreneurial contexts.

*Keywords:* Failure, social entrepreneurship, sustainable, research agenda, dark side

## 5.1 Introduction

Social ventures employ entrepreneurial methods to solve critical social, economic, and environmental problems (Klarin & Suseno, 2023; Mair & Martí, 2006; Zahra et al., 2009). However, hybrid value creation pursued by these ventures involves several challenges that render them especially vulnerable to failure (Kimakwa et al., 2023; Renko, 2013; Smith et al., 2013). Failure is widely recognized as a core component of entrepreneurial activity in mainstream commercial entrepreneurship research and is often associated with learning and adaptation (Jenkins et al., 2014; Ucbasaran et al., 2013). However, the same level of scholarly attention has not been devoted to exploring failure in social ventures (Bacq et al., 2025; Muñoz et al., 2020) and the reasons are numerous.

First, the social entrepreneurship context is rife with success narratives that reinforce an overly optimistic portrayal of social entrepreneurs as heroes and solutions offered by the ventures as cure-alls (Bacq et al., 2025; Lumpkin et al., 2013; Wronka-Pośpiech, 2018; Zietsma & Tuck, 2012). Such selective attention impedes a deeper understanding of the complex risks and challenges that social ventures face (Lumpkin et al., 2013; Wronka-Pośpiech, 2018).

Second, scholars have underscored the differences between commercial and social ventures (Austin et al., 2012; Bacq et al., 2013; Estrin et al., 2013) along various criteria. However, the conceptual distinction between failure in commercial and social ventures is still lacking. Traditional definitions of failure drawn mainly from studying commercial firms often emphasize financial collapse (Ucbasaran et al., 2013). Yet this view fails to capture mission-driven forms of failure that are salient among social ventures. In some instances, social ventures may remain financially solvent while failing to achieve their social or environmental impact objectives (e.g., Drencheva et al., 2023). In other cases, they may even unintentionally harm those they intend to help. These forms and dimensions of failure are often overlooked in the current social entrepreneurship literature, despite their centrality to social venture outcomes

(e.g., Bacq et al., 2025; Czakon et al., 2024).

Finally, existing literature on failure of social ventures remains highly fragmented and lacks conceptual coherence. Studies are dispersed across entrepreneurship, management, psychology, and non-profit disciplines. Each of them uses divergent definitions and methodological approaches to understand failure (e.g., Bacq et al., 2025; Czakon et al., 2024; Vallaster et al., 2019). This limits our understanding of causes and consequences of failure for social ventures (e.g., Bacq et al., 2025; Czakon et al., 2024) and hinders theory development.

Given the gaps elaborated above, scholars have called for a comprehensive exploration of the nature, causes, and consequences of failure in social ventures (e.g., Czakon et al., 2024; Dinh et al., 2024; Lee et al., 2022). In answering their call, we ask: *What do we know about failure in social entrepreneurship? What challenges need to be addressed to theoretically, empirically, and practically move this research stream forward?*

To address these research questions, we conducted a critical review of the extant literature on failure of social venture in order to map the fragmented and emergent research, identify core themes and blind spots, and situate the topic within the broader entrepreneurship discourse. Drawing from 40 peer-reviewed articles, we not only structure the current discourse on failure in social ventures but also uncover underlying patterns and identify significant gaps in the literature. Rather than treating failure as a singular, adverse event, we conceptualize it as a multifaceted phenomenon that varies across different social ventures, with diverse antecedents and consequences. Based on this refined conceptualization, we develop future avenues of research that will advance the understanding of the role of failure in social entrepreneurship.

Our work contributes to social entrepreneurship research and research on hybrid organizations in multiple ways. First, we systematically consolidate and critically review the fragmented and emerging conversations around failure in social entrepreneurship. By bringing

together these disjointed streams, our review clarifies how different scholarly communities conceptualize failure, which assumptions underlie these views, and how these shapes the current state of knowledge. This integration helps move the field beyond isolated case insights and lays the groundwork for a common conceptual and theoretical basis for future inquiry.

Second, we advance theoretical clarity by conceptualizing failure as extending beyond financial collapse to include non-economic dimensions central to social ventures. Building on Saebi et al.'s (2019) dual-mission logic, we argue that ventures can fail by not achieving their social or environmental goals, even if financially viable. Non-economic failures, such as failing to improve beneficiary outcomes or reducing emissions, remain largely overlooked in entrepreneurship research. We also note that these failures can vary in valence, ranging from underperformance to mission reversion, where ventures harm their intended beneficiaries. Moreover, we propose that economic and non-economic failures meaningfully interact, shaping how failure unfolds and is perceived. Recognizing this multidimensional nature of failure and how different stakeholders experience it offers a more accurate foundation for theorizing failure in social entrepreneurship.

Third, we set a future research agenda that addresses critical theoretical, empirical, and practical gaps by linking our multidimensional failure framework to four underexplored research themes. We call for studies on: (1) how empathy and hybrid identities shape vulnerability to failure in the pre-failure phase; (2) divergent stakeholder perceptions of failure, especially regarding non-economic outcomes; (3) the cascading consequences of failure for beneficiaries, communities, and social ecosystems; and (4) the normalization and reframing of failure across individual, organizational, and societal levels. Advancing these themes moves the field beyond firm-centric, economic accounts toward a systematic, multilevel understanding of the antecedents, processes, and consequences of failure in social entrepreneurship.

In the following sections, we contextualize entrepreneurial failure for the social entrepreneurship field, elaborate our methodological approach to conduct the critical literature review and develop a framework to organize the current literature. We offer a critique of the gaps in the existing literature and develop a research agenda that guides future work on expanding the knowledge-base on failure in social entrepreneurship.

## **5.2 Contextualizing failure for social entrepreneurship**

In the entrepreneurship literature, failure is understood in diverse ways, from underperformance to the closing of the venture (e.g., Esau et al., 2024; Granados et al., 2022; van Gils & Horton, 2019). Shepherd (2003, p. 318) defines entrepreneurial failure as “a fall in revenues *and/or* a rise in expenses of such a magnitude that the firm becomes insolvent and is unable to attract new debt or equity funding; consequently, it cannot continue to operate under the current ownership and management”. Yet, failure in a business context can be viewed both objectively, such as financial underperformance, and subjectively, like personal dissatisfaction or stress, influencing an entrepreneur’s decision to exit by closing or selling the business (Cope, 2011; Jenkins & McKelvie, 2016). Meanwhile, exit can pertain either to the entrepreneur’s exit from the venture or to the termination of the business itself (through closure or sale), each shaped by a complex interplay of stakeholder perspectives and personal goals. These processes reflect broader social constructions of what constitutes failure (Mantere et al., 2013). They note that failure imposes significant financial, social, and emotional costs on entrepreneurs, though the impact of these burdens varies across institutional contexts. Formal laws (e.g., bankruptcy regulations), informal cultural norms (e.g., stigma around failure), and governance structures shape how entrepreneurs experience and respond to failure. While some institutional frameworks facilitate second chances and learning from failure, others impose restrictive policies that discourage risk-taking and innovation.

Frequently conceptualized as hybrid organizations, social ventures are distinguished



from commercial ventures by their dual mission: balancing social impact objectives with financial sustainability (Battilana & Lee, 2014; Kumar Hota et al., 2023; Pache & Santos, 2013). This hybridity sets them apart from related forms such as philanthropy, corporate social responsibility, or purely commercial entrepreneurship (Saebi et al., 2019). Unlike commercial ventures, social ventures pursue multiple objectives and are not solely evaluated through financial performance. In general, social ventures opt for economic objectives, on the one hand, that might involve achieving monetary rewards such as acquiring personal wealth or increasing personal income (Bacq et al., 2016). On the other hand, the added non-economic goals are around “to do the kind of work I wanted to do” (Cooper & Artz, 1995, p. 451) with a focus on social goals, which include fulfilling relationships with other people and benefiting society in some way (Bacq et al., 2016). For example, reducing poverty (Zhang et al., 2022), job creation (Battilana et al., 2015), and attending to sustainable development (Diaz-Sarachaga & Ariza-Montes, 2022). Therefore, understandings of failure in the context of entrepreneurship, failure in social entrepreneurship requires additional considerations (Bacq et al., 2025; Czakon et al., 2024).

Scholars have increasingly acknowledged the need to critically examine failure in social entrepreneurship as a counterweight to the longstanding dominance of success narratives in the field. Recent studies have begun to explore diverse dimensions of this phenomenon, including how social entrepreneurs’ cognitive processes during exit decisions vary by type of failure (e.g., Muñoz et al., 2020), how fear of failure impacts innovation and venture creation (e.g., Donaldson et al., 2024; Zhang et al., 2022), and how inappropriate decision logics (e.g., overreliance on effectuation during scaling; Martin et al., 2024) may contribute to failure. Despite these advancements, existing insights remain fragmented across disparate research streams. To comprehensively understand the nature and dynamics of failure in social entrepreneurship, there is a clear need to synthesize and integrate this heterogeneous

body of knowledge. Consequently, a systematic review of extant literature is essential to consolidate the current state of research and to develop a future research agenda that addresses persistent theoretical gaps regarding the antecedents, processes, and outcomes of failure in social entrepreneurship.

### **5.3 Methodological approach**

To advance research on failure in social entrepreneurship, we begin by synthesizing fragmented and emerging studies, which we then critically analyze. The critical review provides a structured overview that connects this underexplored area to the broader field of entrepreneurship. We aligned our methodological approach with the principles of systematic literature review (Siddaway et al., 2019), adapting them to suit the conceptual nature of our study. This included carefully considering terminology, covering synonyms, singular and plural forms, alternative spellings, and broad and narrow terms relevant to database. Based on this, we conducted a selection process to identify and evaluate peer-reviewed articles meaningfully contributing to the emerging discourse on failure in social entrepreneurship. Following the critical review, we develop an understanding of failure in the context of social entrepreneurship, upon which we develop a future research agenda.

#### **5.3.1 Article search and selection**

To identify and select pertinent articles for our critical review, we initially crafted a search string that included keywords relevant to social entrepreneurial aspects, as well as failure terms linked through appropriate search operators. We adapted search terms from existing reviews (e.g., Lee, Wiklund, et al., 2022; Schätzlein et al., 2023; Ucbasaran et al., 2013). Given the emergent state of research on the intersection of failure and social entrepreneurship, we employed a wide range of search terms to encompass potentially relevant articles. Our search utilized key literature databases in entrepreneurship, including Web of Science/SSCI and EBSCO/Business Source Premier, which are recognized for their

extensive use and acceptance in the field (Kraus et al., 2020). We restricted the search to peer-reviewed journal articles in English and searched within keywords, titles, and abstracts. The search term development, outlines databases, and criteria for including and excluding studies are shown in Appendix D1. This search strategy yielded 3,518 results from the two databases.

Next, after removing all duplicates (467), one of the authors and an assistant systemically screened 3,051 articles by scanning the titles and abstracts and excluding articles that either lacked a focus on failure (e.g., failure was very often associated with data fail, failed to moderate, or failed to consider) or the theme around social entrepreneurship (e.g., articles that solely focused on traditional commercial ventures without explicit references to social or environmental goals; Dinh et al., 2024). We intentionally started with a broad search to capture the highly fragmented and inconsistently labeled literature, as a dominant conceptualization and definition of failure in the context of social entrepreneurship is still lacking. Following the PRISMA recommendations, we summarized the screening process in a flow diagram (Appendix D2; Page et al., 2021). We initially identified 33 relevant articles. Through further examination and a reference check, we identified an additional seven relevant articles, resulting in a final sample of 40 articles.

### **5.3.2 Analysis**

The analysis followed a two-stage process combining descriptive evaluation and iterative theme development. First, we conducted a descriptive review of the selected articles to identify key characteristics and emerging trends (Appendix D3). This initial categorization included commonly used classifications such as the research field, study type (empirical-quantitative, empirical-qualitative, or mixed methods), methodological approach (e.g., secondary data analysis, surveys, experiments, interviews, case studies), thematic focus, main findings, and, where applicable, the theoretical framework employed by the authors. We also recorded the geographical context of the study samples. In the second stage, we performed an

iterative, comparative analysis to identify overarching theoretical themes. This involved systematically examining patterns and divergences across the articles to synthesize a higher-order conceptual model of (non-)economic failure in social entrepreneurship (Appendix D3.)

*Descriptive analysis.* The descriptive analysis of the 40 reviewed articles reveals a growing interest in failure within social entrepreneurship, as evidenced by the increasing number of papers published over the last five years. However, the field remains fragmented across disciplines and journals. Research spans 30 journals across four main domains: (1) social impact and sustainability (e.g., *Business and Society*, *Journal of Social Entrepreneurship*), (2) entrepreneurship and small business (e.g., *Journal of Business Venturing* and *Entrepreneurship Theory and Practice*), (3) management and organizational studies (e.g., *Academy of Management Journal* and *Journal of Management Studies*), and (4) innovation and technology (e.g., the *Journal of Technology Transfer & Creativity* and *Innovation Management*). Most studies are quantitative, often employing secondary data or experimental designs, while fewer adopt qualitative or mixed-methods approaches.

#### **5.4 Failure in social entrepreneurship: What we know and how we are limited**

Drawing inspiration from extant research on entrepreneurial failure (Klimas et al., 2020; Ucbasaran et al., 2013), we propose an integrative framework that structures the current body of research on failure in social entrepreneurship across three phases: pre-failure, understanding failure, and post-failure. The framework distinguishes antecedents of failure at the institutional, firm, and individual levels in the pre-failure phase, followed by a conceptual differentiation between economic and non-economic failure in the failure event itself. The post-failure phase captures the stakeholder-specific consequences of failure, including reactions and actions from society, beneficiaries and communities, customers, funders, and entrepreneurs (**Figure 5-1**). This systematic structure enables the identification and critical discussion of key areas that merit further scholarly investigation.



### 5.5 Understanding failure

In the context of social entrepreneurship, we found that failure is understood in many different and mostly implicit ways (see **Table 5-1**). At the institutional level, failure is discussed as *market* or *governmental failure*, the structural inability of markets or public systems to provide essential goods or services. This notion is less prominent in the general entrepreneurial failure literature, but in comparison, it frequently appears in work explaining why social ventures emerge in the first place (e.g., Anokhin et al., 2023; Beaton & Dowin Kennedy, 2021). It is measured through contextual indicators such as socioeconomic conditions or welfare provision. Importantly, this understanding does not refer to venture failure itself, but frames failure as a pre-existing gap that creates demand for social entrepreneurship.

At the organizational level, the dominant focus is on *venture failure*, the classic entrepreneurship notion of terminal collapse through bankruptcy, liquidation, or sale at a loss. This is the most widely studied and cited form (e.g., Battistella et al., 2021; Muñoz et al., 2020; Smollan & Singh, 2021; Wronka-Pośpiech, 2018), typically captured via case evidence, surveys (failed/not), or archival outcomes. Closely related but less examined are *partial* or *project failures* (e.g., van Gils & Horton, 2019; Wang et al., 2024) and *exit* (Nuer et al., 2016; Patzelt & Shepherd, 2024), which reflect discontinuation without necessarily implying collapse. These distinctions highlight different causal mechanisms: while project failures can serve as learning events, venture failure is treated as an ultimate organizational breakdown.

Alongside economic failure, a smaller but growing stream explores *non-economic failure*, where ventures survive financially but fail to achieve their social or environmental goals (e.g., Granados et al., 2022; Seanor & Meaton, 2008). The term “non-economic failure” is not used explicitly in the literature. However, several studies implicitly address it by examining cases where the intended social impact did not materialize or even backfired. This

understanding is still underrepresented but highly relevant for social ventures. It involves assessing beneficiary outcomes, social impact metrics, or mission drift.

Another, less frequently discussed, perspective is *investment failure*, which assesses failure through unmet investor returns, crowdfunding defaults, or loan losses (Hornuf et al., 2021; Lindlar et al., 2025). Here, failure is judged from the viewpoint of capital providers, often through financial performance data. This perspective can conflict with others; a venture may deliver strong social outcomes while still being labeled a financial loss.

Finally, connected concepts which indirectly address venture failure are *fear of failure* as an antecedent to entrepreneurial behavior (e.g., Donaldson et al., 2024; Hoogendoorn et al., 2019) and *stigma of failure* as a consequence affecting reputations and re-entry (Lee, Wiklund, et al., 2022; Shepherd & Patzelt, 2015). These views are numerous and conceptually influential. They are mostly captured through surveys and experimental vignettes, emphasizing how failure is socially constructed rather than purely outcome-based.

**Critique.** While literature offers valuable insights into the various levels and conceptualizations of failure in social entrepreneurship, several limitations emerge. First, much of the existing work adopts fragmented or implicit definitions of failure, resulting in conceptual ambiguity and limiting cumulative theory development. Although there are distinctions between how scholars measured and discussed economic, non-economic, and investment-related failures, there are now explicit conceptualizations and differentiations made. This also implies that the literature has not yet considered their interrelations or trade-offs, particularly when financial and social goals diverge. Second, the operationalization of failure is often outcome-based and binary (e.g., venture failed/not), which overlooks more nuanced trajectories such as mission drift, learning from partial failures, or strategic exits. This limits our understanding of failure as a process rather than an event.

*Table 5-1: Review of failure understandings in the current literature*

| Type of Failure           | Description                                                                                                                                                                                            | Example of Measurements                                                                                                                                                                                                                                                                                     | References                                                                                                                                                                                                                                                                                                                                                                          |
|---------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Market/Government failure | „the inability of a market or systems of markets to provide goods and services either at all or in an economically optimal manner“ (Dollery & Wallis, 1997, p. 115)                                    | <ul style="list-style-type: none"> <li>- Socioeconomic conditions (income and unemployment)</li> <li>- Levels of welfare spending by local government</li> </ul>                                                                                                                                            | Anokhin et al. (2023); Beaton & Dowin Kennedy (2021)                                                                                                                                                                                                                                                                                                                                |
| Firm/Venture failure      | Ultimate indicators of business failure are bankruptcy, liquidation or being sold off at a loss. Failure is also evident in government departments, other state agencies, NGOs and social enterprises. | <ul style="list-style-type: none"> <li>- Case-based: one or several failed ventures</li> <li>- Survey-based: 1 = firm has failed, 0 = firm has not failed</li> <li>- Experimentally-based: vignettes with failure situations</li> </ul>                                                                     | Battistella et al. (2021); Bocken, (2015); Del Gaudio et al. (2025); Esau et al. (2024); Martin et al. (2024); Muñoz et al. (2020); Njiraini et al. (2024); Siwale et al. (2021); Smollan & Singh, (2021); van Gils & Horton (2019); Wang et al. (2024); Wronka-Pośpiech (2018); Wronka-Pośpiech (2024); Dacin et al. (2010); Jace et al. (2022); Jay (2013); Bruneel et al. (2016) |
| Partial failure           | Project failure (e.g., „inactive projects that have been undertaken“), service failure (e.g., troubles with technical support“)                                                                        | <ul style="list-style-type: none"> <li>- Case-based: several cases</li> <li>- Survey-based: Has your enterprise ever experienced project failure?“</li> <li>- Field-study: „period of troubles with technical support and the delivery of products“</li> <li>- Field study</li> <li>- Experiment</li> </ul> | Njiraini et al. (2024); van Gils & Horton (2019); Wang et al. (2024)                                                                                                                                                                                                                                                                                                                |
| Investment failure        | Ventures in crowdlending fail to deliver on their promises, leading to investment losses for investors.                                                                                                |                                                                                                                                                                                                                                                                                                             | Hornuf et al. (2021); Lindlar et al. (2025a)                                                                                                                                                                                                                                                                                                                                        |



Table 5-1: Review of failure understandings in the current literature (continued)

| Type of failure      | Description                                                                                                                                                                                                                       | Example of measurements                                                                                                                                                                                                                                                                                                                                                  | references                                                                                                                                                |
|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
| Non-economic failure | “Failure for social enterprise can be broader than financial insolvency and can also be about not meeting social aims or disappointing socio-political expectations” (Foster & Bradach, 2005; Seanor & Meaton, 2008)              | - Case-based                                                                                                                                                                                                                                                                                                                                                             | Granados et al. (2022); Seanor & Meaton (2008)                                                                                                            |
| Stigma of failure    | „The stigma of business failure is a societal attitude that reflects the interpersonal trust that society has in the individual entrepreneur to engage in productive entrepreneurial activity“ (C. K. Lee, Wiklund, et al., 2022) | - Survey-based<br>- Experimentally-based: metric conjoint                                                                                                                                                                                                                                                                                                                | Lee, Wiklund, et al. (2022); Shepherd & Patzelt (2015)                                                                                                    |
| Fear of failure      | „Dispositional motive or as a negative emotional state“ (Donaldson et al., 2024)                                                                                                                                                  | - Survey-based: „coded fear of failure as “1” if the respondent indicates he/she is afraid of failure and “0” otherwise.”; If a risk factor is deemed important by the respondent, a value of 1 is assigned; 0 otherwise:<br>Perceived financial risk: income: Irregular/not-guaranteed income; Perceived financial risk: bankruptcy: the possibility of going bankrupt; | Donaldson et al. (2024); Hoogendoorn et al. (2019); Urbano et al. (2017); Wei et al. (2024); Zhang et al. (2022); B. Lee (2025)                           |
| Exit                 | „Entrepreneurial exit, i.e. the entrepreneur’s decision to leave and/or terminate his/her venture.“ (Nuer et al., 2016)                                                                                                           | - Conceptual<br>- Interview-based<br>- Case-based<br>- Panel analysis<br>- Experimentally-based                                                                                                                                                                                                                                                                          | Muñoz et al. (2020); Nuer et al. (2016); Patzelt & Shepherd (2023); Shahid, (2023); Singaram, Kraaijenbrink, et al. (2024); Singaram, Nuer, et al. (2024) |

## 5.6 Pre-failure

The pre-failure phase has been of explicit interest among scholars to understand questions such as how, at the institutional level, changes increase the likelihood that ventures fail, how, at the firm level, mission drift might contribute to venture failure, and how, at the individual level, fear of failure may preempt the emergence of social entrepreneurship.

### 5.6.1 Institutional level

At the institutional level, scholars emphasize how the broader institutional environment can obstruct venture success and contribute to venture non-emergence or failure. As such, they have examined how shifting *institutional pressures* and *regulatory changes* can negatively affect venture viability. For instance, Granados et al. (2022) illustrate how structural resistance from powerful actors prevented meaningful integration despite legal acknowledgment of waste pickers in Colombia. This case illustrates how formal institutional change, without corresponding normative and cognitive support, remains insufficient for achieving lasting impact. Power imbalances, even in the face of regulatory victories, continue to limit the potential for success of marginalized groups and expose the limits of institutional reform when implemented in isolation. For example, interest rate caps have constrained the growth and adaptability of social ventures, contributing to their failure (Siwale et al., 2021).

Beyond direct regulatory constraints, ventures must also navigate complex *legitimation dilemmas*, where pursuing external legitimacy among diverse stakeholders may clash with internal mission coherence. When ventures adopt legitimacy strategies that conflict with their core identity, the result can be mission drift or eventual exit (Siwale et al., 2021).

### 5.6.2 Firm level

At the firm level, several critical antecedents to failure have been identified. One of the most pervasive threats is *mission drift*, which occurs when ventures gradually deviate from their social purpose while pursuing financial sustainability (Nuer et al., 2016; Wronka-

Pośpiech, 2018). This risk is especially pronounced during leadership transitions or when strategic decisions favor revenue generation over impact, thereby compromising the venture's core values and diminishing its effectiveness in serving its intended beneficiaries. Mission drift undermines stakeholder trust and contributes directly to organizational decline and failure (Grimes et al., 2020; Nuer et al., 2016).

*Funding challenges* are another key antecedent to failure. Many investors struggle to understand the hybrid nature of social ventures and adopt short-term investment perspectives that often conflict with the long-term horizons typically required for social impact to take root (Bocken, 2015). These funding challenges are consistently linked to failure across other studies (e.g., Njiraini et al., 2024). However, the literature also presents more optimistic findings. Equity crowdfunding, for instance, has provided long-term benefits by significantly reducing failure rates in sustainable ventures, particularly those outside the technology sector (Del Gaudio et al., 2025).

*Challenges to scale up* become significant in the lead-up to failure. While expanding a venture's social impact and market reach are central to the growth aims of social ventures, they also introduce additional complexities. Challenges to scaling include difficulties communicating the intangible benefits of social innovation, overcoming deeply rooted economic paradigms, and barriers to integrating social innovation into established sectors (Battistella et al., 2021; Martin et al., 2024). Thus, successful scaling demands both strategic clarity and adaptability. It also requires enhanced stakeholder engagement, better communication of social impact, and improved resource management to ensure economic sustainability (Battistella et al., 2021). If left unaddressed, these scaling challenges can critically undermine the long-term viability of social ventures.

*Internal conflicts* threaten venture sustainability. In addition to external funding constraints, internal dynamics such as leadership disputes or team misalignment can erode

morale and hinder productivity. Poor resource allocation and operational inefficiencies often impair a venture's ability to fulfill its social mission (Wronka-Pośpiech, 2018). Moreover, lapses in leadership and management (Yang & del Carmen Triana, 2019), critical skill gaps, and the unexpected departure of key personnel have been linked to venture failure (Njiraini et al., 2024). Furthermore, cognitive frames of founding teams contribute to either survival or failure. In their longitudinal case study, Esau et al. (2024) found that social ventures adopting a narrow cognitive frame are more likely to fail early because they often struggle to reconcile tensions between sustainable and financial goals. In contrast, ventures with a paradoxical cognitive frame, embracing both goals/and thinking, demonstrate greater adaptability and are more likely to survive past the proof-of-concept stage. In contrast, some entrepreneurs step away once they feel the venture has successfully fulfilled its purpose, attained financial stability, or developed sufficient organizational maturity. These exits are less about failure and more about ensuring long-term mission continuity, often through leadership handover of the venture (Singaram et al., 2024).

Moreover, *collaboration challenges* can further be an antecedent of both non-economic and economic failure (e.g., Scott & Teasdale, 2012). Researchers highlight that misaligned goals, resource incompatibility, and a lack of clear collaboration outcomes are critical obstacles that can hinder the success of partnerships between the venture and its stakeholders (Günzel-Jensen & Rask, 2021). When ventures fail to properly align with collaborators on strategic objectives or face challenges in resource sharing and expertise integration, these issues can lead to inefficiencies, stakeholder dissatisfaction, and ultimately, failure to achieve desired environmental and business outcomes.

### 5.6.3 Individual level

At the individual level, prior research has concentrated on three pre-failure factors. First, a prominent psychological barrier for entrepreneurs is the *fear of failure*, characterized

by a persistent, often irrational anxiety about falling short of personal or societal expectations (VandenBos, 2007). Social entrepreneurs appear to be more susceptible to this fear than their commercial counterparts, largely due to the complex and conflicting expectations of their diverse stakeholders (Hoogendoorn et al., 2019). This heightened psychological pressure not only discourages the formation of new ventures (Wei et al., 2024) but also suppresses the innovative behaviors deemed essential for long-term success (Donaldson et al., 2024; Urbano et al., 2017; Zhang et al., 2022).

Second, closely related to fear of failure are *perceived barriers and self-efficacy*, which can significantly affect entrepreneurial persistence. Entrepreneurs often face involuntary exits when persistent structural and operational challenges, such as limited institutional support, chronic resource constraints, or declining self-efficacy, become overwhelming (Shahid, 2023). When ventures struggle to maintain financial viability or deliver measurable social impact, these stressors can erode an entrepreneur's confidence in their capabilities, making the venture's continuation increasingly untenable. Over time, this erosion of self-efficacy not only contributes to venture failure but also diminishes the likelihood of reengaging in social entrepreneurial activity (Shahid, 2023).

Recent studies highlight that entrepreneurs' *skill sets*, particularly in marketing, play a critical role in shaping venture outcomes. A lack of entrepreneurial marketing skills, often linked to outdated or misaligned pedagogies in business schools, has been identified as a significant factor contributing to the failure of sustainable ventures (Amjad et al., 2020).

Finally, *stakeholder considerations* add a cognitive perspective to antecedents of failure. Rather than being guided solely by personal motivations, such as a preference for profit or impact, social entrepreneurs make decisions based on the specific venture's situated context. Muñoz and colleagues have found that social and commercial entrepreneurs dynamically adjust their cognitive processes depending on the venture type (Muñoz et al.,

2020). Social entrepreneurs tend to persist out of a perceived obligation to the stakeholders and the mission they serve. In contrast, commercial entrepreneurs undertake more cognitively intensive assessments of whether to persist or exit. Hence, cognitive effort and decision pathways are shaped by the nature of the venture, rather than the type of entrepreneur alone.

**Critique.** While there is emerging research at the individual level that explains how failure unfolds or is prevented, there are at least two aspects that limit these emerging views. First, the focus on cognitive and self-regulatory mechanisms leaves the emotional dimension of individual-level antecedents notably underexplored. While empathy and compassion are widely recognized as key drivers of social entrepreneurial intentions (Bacq & Alt, 2018; Yitshaki et al., 2022), their role in shaping pre-failure dynamics has received almost no attention. Compassion may support early opportunity recognition, yet strong emotional attachment can also lead to over-identification with beneficiaries, making emotionally difficult but strategically necessary decisions (e.g., layoffs, mission pivots) harder to take. By portraying empathy and compassion only as positive enablers, current research overlooks their potential to amplify emotional strain, overcommitment, or decision paralysis, leaving a central blind spot in explaining why some social entrepreneurs persist constructively while others emotionally collapse under pressure.

Second, current research also neglects how identity struggles shape vulnerability to failure. Although identity-based theorizing is well established in social entrepreneurship, it has rarely been applied to pre-failure dynamics. Entrepreneurs often navigate conflicting commercial, social, and ecological logics (Wry & York, 2017; York et al., 2016), and the difficulty of reconciling identities can trigger decision paralysis, mission drift, and eroding stakeholder trust well before a formal exit. Social identity theory suggests that different “other-orientations” (Fauchart & Gruber, 2011; Pan et al., 2019) shape how entrepreneurs interpret failures and allocate scarce resources under pressure, while misalignment between

personal values and evolving founder identity can deplete resilience and accelerate withdrawal (O’Neil et al., 2022). Without an explicit identity lens, current research risks overlooking how such unresolved identity tensions silently undermine ventures in the pre-failure phase.

### **5.7 Post-failure**

To capture the multifaceted impact of failure, we structured the literature around its consequences, reactions, and actions for internal and external stakeholders. The stakeholder categories considered in this study were derived from our review and guided by prior research that identifies key actors in social entrepreneurship (e.g., Pollack et al., 2017; Roundy, 2014).

*Society*, understood as the broader public, tends to respond to the failure of social ventures with a relatively high degree of empathy and understanding. Studying this in the German context, Shepherd and Patzelt (2015) found that societal evaluations of failed social entrepreneurs are more forgiving, often attributing failure to external factors due to the ventures’ pro-social intentions. Perspective-taking facilitates this empathy, reducing stigma and fostering positive perceptions of failure.

*Customers*, by contrast, seem to apply more stringent moral expectations to social ventures. Customers of sustainable products or services place a premium on authenticity and demand greater alignment between business practices with stated social values (van Gils & Horton, 2019). When ventures fail to meet these expectations, particularly in moments of failure, customers’ trust may erode significantly. Breach of moral standards can have more severe reputational consequences than in commercial settings, ultimately threatening customer loyalty and undermining a venture’s operational viability.

*Funders* represent another critical stakeholder group affected by failure. Their role becomes especially salient when assessing the long-term implications for social entrepreneurs seeking future funding. A failed social venture often translates directly into investment failure

for those who provided financial backing, which influences investor behavior in subsequent funding decisions. In the context of crowdlending, Lindlar et al. (2025) find that this negative experience can limit future access to capital for sustainable entrepreneurs. Similarly, equity crowd funders exhibit heightened sensitivity to losses in sustainable ventures (Hornuf et al., 2021). Following a failure, these crowd funders show reduced willingness to support similar initiatives in the future. This effect is further amplified among experienced crowd funders, who, based on prior exposure, place greater weight on the consequences of failure and become increasingly risk-averse in future sustainable investments (Lindlar et al., 2025).

Scholars have repeatedly argued that *social entrepreneurs* respond to failure in different ways, both cognitively and emotionally, and therefore their behavioral responses also differ (Dacin et al., 2010; Smollan & Singh, 2021; Wronka-Pośpiech, 2024). Unlike commercial entrepreneurs, who frequently externalize failure, social entrepreneurs tend to internalize it as a personal shortcoming, interpreting it as a failure to deliver on social impact (Smollan & Singh, 2021). This perspective intensifies emotional responses, including disappointment, guilt, and anxiety. It is further compounded by a strong sense of accountability to beneficiaries and other stakeholders (Smollan & Singh, 2021). As a result, recovery from failure often takes longer, and re-entry into entrepreneurship is delayed or reconsidered, particularly when the perceived failure involves letting down vulnerable communities (Smollan & Singh, 2021). Supporting this view, Patzelt and Shepherd (2023) find that failure can lead to emotional and cognitive fatigue, which may discourage future entrepreneurial engagement, especially when entrepreneurs feel they have failed those they sought to help.

Despite these challenges, failure can also serve as a source of *learning and growth*. Ambiguity around organizational identity and misalignment of goals, while often precursors to failure, can act as catalysts for reflection and improvement. Seanor and Meaton (2008)



argue that such ambiguity, coupled with limited trust and poor communication, can suppress open dialogue about failure. However, fostering a culture that embraces transparent discussions and shared learning is key to building future resilience. Expanding on this, Wang et al. (2024) demonstrate that the normalization of failure, paired with effective resource orchestration, can enhance post-failure growth performance among social ventures. Learning strategies that promote failure analysis, combined with efficient resource absorption, integration, and application, are essential for recovery and future success.

Importantly, the stigma of failure may not only hinder *entrepreneurs* but also create *opportunities* for them. In contexts where failure carries significant reputational risk, social entrepreneurship can be viewed as a morally commendable path. For example, in collectivistic cultures such as China, where social stigma is prevalent, failed entrepreneurs may be drawn to social ventures to restore or enhance their social standing (C. K. Lee, Simmons, et al. 2022). Thus, the reputational risks associated with failure may paradoxically incentivize individuals to pursue socially oriented ventures. Beyond the individual level, failure can also generate new systemic opportunities. Disruptions within markets, governments, or natural systems frequently expose societal gaps that create fertile ground for social entrepreneurship (Anokhin et al., 2023; Beaton & Dowin Kennedy, 2021). For instance, government responses often fail to adequately address market failures, such as unemployment, particularly during economic recessions. Austerity measures further exacerbate these gaps, leaving vulnerable communities underserved. In such contexts, “double market failures”, where market and government mechanisms fail, social ventures tend to intervene (Anokhin et al., 2023; Santos, 2012). Natural disasters similarly reveal structural weaknesses and unmet demands in affected communities, catalyzing the emergence of new social ventures (Wei et al., 2024).

Social entrepreneurs adopt different strategic roles to respond to these institutional

gaps. Beaton and Dowin Kennedy (2021) distinguish between market reallocators, who provide immediate solutions by redistributing existing resources, and market menders, who work toward long-term change through systemic innovation. These complementary approaches underscore how institutional failure can catalyze entrepreneurial action, underscoring the role of social ventures as agents of social transformation. Kachlami (2017) adds another layer by highlighting a competitive dynamic and observing that the exit of social ventures tends to increase the entry of commercial ventures, most likely due to freed-up resources. While the presence of social ventures may suppress commercial entry due to competition, their failure seems to ease resource constraints for traditional businesses, which points to complex interdependencies between venture types.

**Critique.** Although research on post-failure dynamics in social entrepreneurship has advanced considerably, current studies remain fragmented and biased toward specific stakeholder perspectives. Most work concentrates on entrepreneurs' internal reactions or on the behavioral consequences for investors, while treating other stakeholders, especially beneficiaries and local communities, primarily as passive bystanders. This leaves a critical blind spot, as the social systems and support structures that ventures embed themselves in are rarely analyzed as co-affected by failure, even though they often depend on these ventures for essential services or advocacy. Moreover, research tends to approach failure as an individualized, episodic event rather than a relational and systemic disruption that reverberates through social networks, erodes trust, and reshapes stakeholder expectations. Emotional and moral processes among external stakeholders remain under-theorized, despite evidence that customers, funders, and communities often attach heightened normative expectations to social ventures.

At the same time, existing work primarily focuses on reactions to failure in social entrepreneurship (e.g., trust reactions by customers, affective responses by entrepreneurs) and

provides much less of an understanding of actions after failure, including coping with failure in this context. Overlooking the cultural taboos, moral framings, and collective sensemaking that shape how failure is interpreted and acted upon across ecosystems. While studies acknowledge stigma, they rarely explore how stigma is constructed, contested, or potentially transformed after failure, or how narrative work might restore legitimacy. Finally, research on learning from failure remains organization-centric, focusing on how ventures/entrepreneurs recover resources or performance, while neglecting how trust, identity, and meaning are rebuilt among affected stakeholders. Without addressing these gaps, current scholarship risks over-individualizing post-failure responses and underestimating the broader societal consequences of social venture collapse.

### **5.8 A Framework for identifying and organizing research opportunities**

To summarize current research and to develop a basis to advance theoretical understanding of failure in social entrepreneurship systematically, we draw a framework that is organized along three stages of failure: (a) pre-failure, (b) within failure, (c) post-failure (**Figure 5-1**). All solid lines indicate research areas that have already advanced, based on emerging research over the past decade (see our review). In contrast, all dashed lines indicate areas that demand further research. In particular, as already highlighted in the critique, the conceptualization of failure in the context of social entrepreneurship warrants more attention as fragmented and especially non-explicit failure understandings prevent research from systematic advancements and also led to one of the most explicit gaps in this emerging research stream, namely, understanding the non-economic part of failure in social entrepreneurship. To base our future research opportunities in the next section (**Table 5-2**), we thus first propose a conceptualization of failure in social entrepreneurship.

**Table 5-2: Future research questions**

| Theme                                                                          | Future research questions                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Theoretical anchors                                                                                                                                                                    |
|--------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>Antecedents of failure at the individual level in the pre-failure phase</i> | <ul style="list-style-type: none"> <li>- How does fear of failure (FoF) affect the likelihood of economic versus non-economic failure in social entrepreneurs differently?</li> <li>- What role do cognitive frames and moral commitments play in delaying exit or pivot decisions in the face of impending failure?</li> <li>- How do traits like resilience, self-efficacy, and stress tolerance predict which type of failure (economic/non-economic) is more likely or severe?</li> <li>- How do entrepreneurs' psychological responses to early signals of failure determine whether failure is mitigated or escalated?</li> <li>- How do entrepreneurs' cognitive attributions of failure (internal vs. external) vary by failure type, and how does this affect learning and recovery?</li> <li>- Does emotional investment in mission-related outcomes exacerbate the psychological burden of non-economic failure more than economic failure?</li> </ul>                                                                                         | <ul style="list-style-type: none"> <li>- Self-determination theory</li> <li>- Entrepreneurial cognition</li> <li>- Cognitive appraisal theory</li> <li>- Attribution theory</li> </ul> |
| <i>Divergent perceptions of failure across stakeholder groups</i>              | <ul style="list-style-type: none"> <li>- When and for whom does failure constitute failure in the context of social entrepreneurship?</li> <li>- How do various stakeholders (e.g., entrepreneurs, investors, beneficiaries) differentially evaluate the failure of social ventures, particularly in relation to economic and non-economic goals?</li> <li>- How is non-economic failure conceptualized, measured, and communicated in social ventures?</li> <li>- What mechanisms exist (or are lacking) for assessing non-economic outcomes, such as beneficiary well-being, and how do these influence the recognition of failure?</li> <li>- How do communication strategies surrounding non-economic failure shape stakeholder perceptions and generate tensions or alignment?</li> </ul>                                                                                                                                                                                                                                                            | <ul style="list-style-type: none"> <li>- Expectation violation theory</li> <li>- Schema theory</li> <li>- Social impact theory</li> <li>- Signaling theory</li> </ul>                  |
| <i>Consequences of failure for beneficiaries and communities</i>               | <ul style="list-style-type: none"> <li>- What are the social and emotional consequences of social venture failure for beneficiaries, and how do these consequences affect their well-being and trust in entrepreneurial solutions?</li> <li>- To what extent does venture failure contribute to the re-emergence of unmet needs or the breakdown of community support systems?</li> <li>- In what ways do personal and emotionally embedded relationships between social entrepreneurs and beneficiaries shape the experience and consequences of failure?</li> <li>- What types of ventures function as "keystone actors" in social ecosystems, and what happens when they fail?</li> <li>- How does the failure of social ventures influence perceptions of entrepreneurial legitimacy and the perceived viability of entrepreneurship as a tool for social change?</li> <li>- Do repeated failures in social entrepreneurship lead to disillusionment among stakeholders, or do they catalyze adaptation and resilience within communities?</li> </ul> | <ul style="list-style-type: none"> <li>- Duck's model of relationship dissolution</li> <li>- Attachment theory</li> <li>- Stakeholder theory</li> </ul>                                |
| <i>Approaches to failure</i>                                                   | <ul style="list-style-type: none"> <li>- How do and can beneficiaries and communities deal with failure?</li> <li>- How can ventures communicate effectively to work with non-economic failure?</li> <li>- How can ventures work internally to understand reasons for failure and improve?</li> <li>- How might ventures decide to pivot after non-economic or economic failure?</li> <li>- How do and can social entrepreneurs cope with failure and recover their well-being?</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | <ul style="list-style-type: none"> <li>- Collective Action and Social Movement Theory</li> <li>- Sensemaking Theory</li> <li>- Narrative Theory</li> <li>- Trauma Theory</li> </ul>    |

### 5.8.1 Conceptualizing failure in social entrepreneurship

Although existing literature recognizes that failure in social entrepreneurship manifests in varied forms (e.g., Wronka-Pośpiech, 2018), the field lacks a clear differentiation of these variations. A more nuanced understanding of failure, beyond economic collapse, is necessary to refine theoretical perspectives and address conceptual gaps in entrepreneurship research. To that end, we adapt the dual-mission framework of Saebi et al. (2019), which classifies social entrepreneurship based on economic and social mission intensity. Extending this logic, we propose that to capture failure in the context of social entrepreneurship, we need to introduce an understanding of non-economic failure and elaborate on the interactive effects between non-economic and economic failure.

Social ventures are inherently mission-driven, with non-economic goals forming the core of their purpose (Stevens et al., 2015). Failure to achieve these goals, what we term *non-economic failure*, involves *the inability to deliver on a venture's intended social or environmental impact outcomes* (Njiraini et al., 2024; Siebold et al., 2019). For instance, a clean energy company may remain financially viable but fail to meet its promised carbon reduction targets, or a social education venture may sustain operations but fail to improve learning outcomes for its target beneficiaries. The notion of non-economic failure has begun to surface in the literature, such as Smollan and Singh's (2021, p. 4) perspective, which includes failure to meet goals “crucial to achieving the overall social mission, as stipulated by the entrepreneur”. Yet, within the dominant conceptualization of failure in conventional entrepreneurship, non-economic failures are only indirectly considered at the individual level, through the subjective evaluations of the entrepreneur's unmet expectations (Jenkins & McKelvie, 2016). In cases where an entrepreneur sets social or environmental goals and fails to meet them, this may be perceived as an individual-level perception of failure. However, explicit considerations and investigations of non-economic failure are still missing. This is

notable given ongoing discussions and increasing research on how social ventures measure and track their outcomes (Fichter et al., 2023; Rawhouser et al., 2019; Trautwein, 2021).

We further propose that (non-)economic failure may be distinctive in another dimension, one that is often overlooked yet implicitly addressed in the literature, namely, the *valence of failure*. Failure may involve underperformance, lack of achievement, or even mission reversal, where ventures not only fail to achieve social impact but actively harm beneficiaries. For example, a social venture may fall short on all stated objectives (social impact underperformance) or, more critically, may pursue practices that undermine its mission and cause adverse outcomes (social impact reversion). Recognizing this spectrum moves beyond binary success/failure dichotomies and introduces greater conceptual depth to the study of failure. In view of the existing differences in cases used to understand the antecedents and consequences of failure in social entrepreneurship (ranging from partial to total failure), we believe there is a need to distinguish between these types conceptually.

Building on the proposed conceptualization of non-economic failure, the critique of prior literature and identified gaps is also depicted in **Figure 5-1**. We propose four research avenues that are mostly likely to advance theory on failure in social entrepreneurship to answer our third research question: What theoretical, empirical, and practical challenges must be overcome to advance research on failure in social entrepreneurship?

### **5.8.2 Specifying emotional and identity-based vulnerabilities in the pre-failure phase**

The first research theme we identified concerns the *antecedents of failure at the individual level*. Building on the critique that emotional antecedents are underexplored, future research could systematically examine how social entrepreneurs' relationships with beneficiaries shape pre-failure dynamics. While empathy and compassion are widely acknowledged as drivers of social entrepreneurial action, emerging evidence suggests that these traits are not uniformly beneficial. Shepherd et al. (2023) highlight that entrepreneurs'

empathy orientations, how they attend to beneficiaries' needs and enact interventions, produce varied outcomes, both for the venture and for stakeholders. Similarly, Kurz et al. (2024) demonstrate that empathy can exhibit a “too-much-of-a-good-thing” effect, where excessive empathic engagement can exacerbate stress, reduce strategic clarity, and hinder decision-making, particularly among highly anxious entrepreneurs.

Future studies could adopt longitudinal, process-oriented designs to investigate how different empathy profiles influence the likelihood of economic, non-economic, or hybrid failures. For instance, does over-identification with beneficiaries delay difficult but necessary decisions (e.g., layoffs, mission pivots), accelerate emotional exhaustion, or increase susceptibility to mission drift? Research could also explore boundary conditions and moderators, such as founder anxiety, cognitive framing, or organizational support, to identify when empathy acts as a constructive driver versus a liability. By integrating theories of empathic entrepreneurial action (Shepherd et al., 2023) and the inverted-U effects of empathy (Kurz et al., 2024), future research can provide a nuanced, proactive framework for understanding how emotional ties with beneficiaries both enable and constrain social venture survival, offering actionable insights for founder training, mentorship, and support interventions.

Second, while identity-based theorizing is well established in the social, sustainable, and environmental entrepreneurship literatures, it has been largely absent from research on failure in social entrepreneurship. Prior work shows that entrepreneurs often navigate hybrid logics, commercial and social welfare (Wry & York, 2017) or commercial and ecological (York et al., 2016), and that these tensions are deeply rooted in their identities. Yet, despite mounting evidence that hybrid identities shape how entrepreneurs recognize opportunities, mobilize stakeholders, and define venture success, we know virtually nothing about how identity complexity influences the risk of failure. Social identity theory could offer particular

value here, as it helps explain variation in entrepreneurs' "other-orientation" (Fauchart & Gruber, 2011; Pan et al., 2019), for instance, whether they see themselves as serving primarily themselves ("Darwinians"), known others ("Communitarians"), or unknown others ("Missionaries"). Such identity-based orientations likely affect not only strategic decision-making under pressure, but also how entrepreneurs interpret failure and emotionally cope with decline. Likewise, identity work aimed at sustaining authenticity (O'Neil et al., 2022) may either buffer entrepreneurs against failure or deepen crises when ventures drift from their espoused missions. Without an explicit identity lens, current research risks overlooking how misalignments between personal, social, and role identities can exacerbate strain, stall course correction, or accelerate emotional exhaustion, leaving a central blind spot in understanding why some social entrepreneurs disengage while others persist through adversity.

### **5.8.3 Accounting for divergent perceptions of failure across stakeholder groups**

A second research theme emerging from our critique of the extant literature centers on the *divergent perceptions of failure across stakeholder groups*. While prior research has distinguished between objective and subjective evaluations of failure (e.g., Jenkins & McKelvie, 2016), theoretical perspectives often remain entrepreneur- or investor-centric, particularly privileging economic indicators. However, in the context of social ventures, where social and environmental goals are central, objective failure assessments are frequently unavailable due to the absence of systematic measurement and reporting of non-economic outcomes. As a result, evaluations of whether such ventures have failed rely heavily on subjective interpretations. This subjectivity becomes especially pronounced when considering non-economic performance, highlighting a limitation in current frameworks that inadequately account for heterogeneity in stakeholder perspectives. There is thus a critical need to investigate how various stakeholders, such as entrepreneurs, investors, and beneficiaries, differ in their perceptions of failure, especially when a social venture ceases operation. Recent



research by Shepherd et al. (2023), for example, underscores the disjunction between entrepreneurs' and beneficiaries' conceptualizations of well-being, a core objective in social ventures. Failure to enhance beneficiary well-being may be perceived as a social impact failure, yet interpretations of this failure may vary considerably depending on whose perspective is considered. Exploring these interpretive discrepancies provides a promising avenue for advancing theory on failure in social entrepreneurship, particularly by accounting for pluralistic stakeholder evaluations that extend beyond traditional economic metrics.

In that vein, an important avenue for future research concerns the question of *when* and *for whom* failure constitutes failure in the context of social entrepreneurship. Existing literature has yet to adequately explore how diverse stakeholders, such as entrepreneurs, investors, and beneficiaries, differentially evaluate venture outcomes, particularly when non-economic goals are central. Current research provides limited insight into the conceptualization, measurement, and communication of non-economic failure, as well as how the lack of standardized assessment mechanisms contributes to interpretive ambiguity. This calls for a deeper inquiry into how subjective judgments shape the recognition and framing of failure. Divergent stakeholder evaluations may influence not only the legitimacy and narrative of failure but also critical aspects of the venturing process, including post-failure sensemaking, reputational consequences, and strategic redirection.

To address these gaps, integrating underutilized theoretical perspectives may prove fruitful. Schema theory (Bartlett, 1995; Lafuente et al., 2018; Rumelhart, 2017) suggests that individuals interpret events through mental frameworks shaped by prior experiences, influencing what is noticed, valued, and remembered. Similarly, Expectation Violation Theory (Burgoon, 2015) highlights the role of cognitive and emotional evaluations when expectations are unmet, offering a lens to examine how perceived discrepancies in impact outcomes affect stakeholder reactions. Social Impact Theory (Latané, 1981) further

underscores the importance of understanding how social impact is perceived, distributed, and experienced across stakeholder groups. These perspectives can enrich our understanding of how the perceived magnitude and salience of impact loss shape the interpretation of failure. Future research should also investigate how communication strategies around non-economic outcomes contribute to stakeholder alignment or tension, potentially mediating their responses to venture failure and influencing long-term collaboration and trust.

#### **5.8.4 Understanding the consequences of failure for beneficiaries and communities**

A third important research theme addresses the consequences of venture failure for beneficiaries, communities, and other stakeholders embedded in social welfare logics. While existing literature on entrepreneurial failure has predominantly focused on entrepreneurs and investors (e.g., Jenkins et al., 2014), the implications of failure for those at the receiving end of social or environmental interventions remain underexplored. This gap is particularly significant in the context of social entrepreneurship, where ventures explicitly aim to enhance beneficiary well-being (Kroege & Weber, 2014). Unlike traditional ventures, social entrepreneurs often maintain emotionally embedded and morally infused relationships with their beneficiaries, which intensifies the personal and social dimensions of failure. When such ventures fail, the consequences extend beyond financial loss, potentially disrupting trust, re-exposing unmet needs, and unraveling fragile support systems, particularly in regions characterized by institutional voids.

These cascading effects suggest a need to reconceptualize failure not merely as an isolated organizational outcome, but as a systemic disruption within broader social ecosystems. Drawing from ecological science, concepts such as the *keystone species* and *trophic cascades* offer metaphorical insight into how the loss of pivotal ventures can trigger adverse ripple effects throughout dependent communities. Certain social ventures may serve as “keystone actors,” disproportionately sustaining local welfare or service provision. Their

failure could lead to a breakdown in social infrastructure, delegitimization of entrepreneurial solutions, or erosion of trust in market-based approaches to social change.

To theorize and research more in-depth consequences for stakeholders concerning failure in social entrepreneurship, relationship models such as Duck's (1982) model of relationship dissolution (Rollie & Duck, 2013) and attachment theory (Hazan & Shaver, 2017; Mikulincer & Shaver, 2007) provide promising conceptual tools. These perspectives highlight the relational and emotional processes involved in disengagement, which may be mirrored in the breakdown of trust and attachment between social entrepreneurs and their beneficiaries. In parallel, stakeholder theory (Freeman et al., 2010) may offer a valuable lens to examine how different stakeholder groups are affected by venture failure and how their interests, identities, and well-being are impacted. Future research should explore which types of social ventures function as keystone actors in social ecosystems, how communities interpret and respond to their failure, and whether repeated failures lead to disillusionment or stimulate collective resilience and adaptive capacity. Such investigations are essential for understanding the long-term societal implications of social venture failure and for developing more robust frameworks that account for the complexity and embeddedness of social entrepreneurial ecosystems.

### **5.8.5 Freeing from taboos at all levels**

A final research theme concerns the societal, organizational, and individual approaches to failure, which imply active engagement with failure in the context of social entrepreneurship. While existing studies have primarily examined failure from an economic or venture-centric standpoint, there is growing recognition that failure in social entrepreneurship unfolds across multiple levels and involves more complex moral, social, and institutional dimensions. At the societal level, failure in social entrepreneurship remains entangled with stigma, challenges to legitimacy, and deeper moral narratives. Unlike

commercial ventures, social ventures operate under heightened expectations of social responsibility, and their failure may provoke broader societal concerns about the viability of entrepreneurial approaches to solving social problems. Yet, there is limited research on how failure in this domain is collectively interpreted, normalized, or resisted within entrepreneurial ecosystems. Theoretical lenses from investigations of social movements (Snow et al., 1986) intersect with framing theory (Entman, 1993; Goffman, 1974), offering promising avenues to explore how failure can be reframed and rendered speakable through narratives, advocacy, and strategic cultural positioning. These perspectives can help illuminate how social legitimacy is either eroded or restored following the collapse of social ventures, and how ecosystem actors might mobilize collective sensemaking and discourse to address the taboo of failure.

At the community and stakeholder level, research has yet to fully explore how beneficiaries, funders, or community members interpret and respond to failure. Attribution theory (Kelley, 1967) and sensemaking theory (Weick, 1995) suggest that failure constitutes a disruption of expectations, prompting actors to construct new explanatory narratives and reconfigure trust. However, existing work rarely considers the implications of these processes when the failure concerns social or environmental missions. Future research should investigate how community-level actors respond to perceived mission failure, how trust and legitimacy are rebuilt, and how local stakeholders construct meaning in the absence of tangible economic loss.

At the organizational level, concepts such as organizational resilience, crisis management, and learning from failure provide valuable insights into how ventures adapt post-failure. However, most studies emphasize financial or market-based outcomes, overlooking how organizations navigate non-economic failure. Future inquiry is needed into how social ventures process mission failure internally, how they communicate non-

performance externally, and how they manage the tension between pivoting and mission drift. Narrative theory (Barbatsis, 2004) is particularly relevant here, as storytelling plays a foundational role in the identity and legitimacy of social ventures. How failure is narratively framed, whether as a learning opportunity, systemic injustice, or unintended outcome, can significantly influence stakeholder reactions and future legitimacy.

Finally, at the individual level, the emotional and psychological consequences of failure in social entrepreneurship remain under-theorized. While a growing body of literature addresses entrepreneurial coping, it primarily focuses on economic stressors or external crises. Non-economic failure, such as failing to deliver social change, can be emotionally taxing and morally disorienting, yet remains analytically neglected. Theoretical frameworks such as narrative therapy (White, 2002; White & Epston, 1990) and trauma theory (Herman, 2015) may offer a more profound understanding of how entrepreneurs process such failures, especially when social expectations and personal values are deeply intertwined. Future research should explore how social entrepreneurs cope with failure, recover their well-being, and potentially re-engage with their missions, offering a more holistic view of the aftermath of failure in morally complex entrepreneurial contexts.

## **5.9 Conclusion**

This review has critically examined the fragmented and underdeveloped literature on failure in social entrepreneurship, conceptualizing it as a multidimensional phenomenon that extends beyond financial collapse to encompass non-economic shortcomings central to mission-driven ventures. By analyzing pre-failure conditions, forms of failure, and post-failure stakeholder reactions, we reveal distinct challenges that differentiate failure in social ventures from that in conventional entrepreneurship. Our synthesis highlights conceptual ambiguities, methodological limitations, and underexplored intersections, particularly regarding stakeholder dynamics and the recursive nature of failure experiences. Building on

these insights, we propose a research agenda that addresses key theoretical and empirical gaps, intending to advance a more systematic, nuanced, and context-sensitive understanding of failure in social entrepreneurship.

## 6. Conclusion

### 6.1 Summary of findings

This dissertation presents four essays that aim to deepen the understanding of stakeholder reactions to failure in impact versus commercial ventures and the factors that influence these reactions. In particular, the essays uncover how crowd investors' prior crowdfunding experience, personal values, gender dynamics, and attributional framing influence their reactions to failure. This dissertation further broadens its aim from a small stakeholder group (crowd investors) to a wider context, thereby presenting a multidimensional framework of failure that interacts with distinct stakeholder groups and influences decisions across different failure types. Through applying different research methodologies, including vignette experiments and surveys (Essay I and Essay II), metric conjoint analysis (Essay II and III), and a systematic literature review, combined with a conceptual approach (Essay IV), this dissertation contributes to the understanding of these relationships. The following discussion summarizes the major findings of each essay.

**Essay I** served as the starting point by examining how crowd investors react to the failure of impact versus commercial ventures. It identified the key influencing factors on investment decisions in the context of failure, such as investors' crowdfunding experience, personal values, and the nature of the venture. Drawing on signaling theory (Spence, 1973), Essay I argued that experienced crowd investors, owing to their more refined cognitive schemas, generally are more forgiving towards investment failure than inexperienced crowd investors. Furthermore, the results from two vignette-based experiments confirm the hypothesis that experienced investors tend to invest more after a failure than their inexperienced counterparts. However, this effect reversed in the context of environmental ventures: experienced crowd investors react more negatively to failures in environmental ventures than in commercial ones, whereas no consistent moderating effect was observed in

social ventures. In a follow-up survey, Essay I showed that experienced crowd investors score higher on self-transcendence (especially biospheric) values than inexperienced crowd investors, suggesting that emotional attachment to environmental goals may partly explain why experienced crowd investors penalize environmental failures more harshly. Overall, Essay I established a foundational understanding of how failure is perceived differently across venture types.

Building on the first essay's finding that crowd investors' prior crowdfunding experience moderates reactions to failure in crowdlending among impact ventures, **Essay II** advanced the analysis by examining two distinct failure perspectives, namely *investment failure* and *entrepreneurial failure*, and their role in activating stereotypes among female entrepreneurs and impact ventures in crowdlending. Drawing on the stereotype activation and application framework (Kunda & Sinclair, 1999; Kunda & Spencer, 2003), an audio-vignette study showed that when crowd investors personally experience investment failure, they are more likely to penalize female entrepreneurs in subsequent funding decisions, particularly those leading impact ventures (specifically social ones). Hence, the results revealed that social venture framing amplifies negative biases against female entrepreneurs after investment failure, whereas it does not disadvantage their male counterparts to the same extent. In contrast, a metric conjoint analysis focused on prior entrepreneurial failure did not yield gender-differentiated or venture-type effects, suggesting that stereotype activation is more likely when failure poses a direct threat to the investor's self-concept. However, the results of the metric conjoint analysis also indicated that crowd investors are generally less likely to invest in entrepreneurs with prior failures than in entrepreneurs with no prior experience or who have been successful, regardless of gender or venture type. These findings highlight context-specific activation of gender stereotypes and underscore the need to distinguish among types of failure when assessing crowd investor behavior in impact ventures.



**Essay III** drew on the findings of Essay II to explore the signals that could help failed entrepreneurs regain crowd investor support. Specifically, it examined how different failure attributions influence crowd investors' willingness to invest, using attribution theory as a theoretical lens. A metric conjoint experiment revealed that crowd investors react more favorably to internal, unstable, and controllable attributions of failure, suggesting that entrepreneurs' failure communication has distinct effects on crowd investors' lending behavior. These findings emphasize the importance of how entrepreneurs frame their past failure experiences in crowdlending contexts. Furthermore, although no differential effects emerged between commercial and impact ventures, this study identifies a key boundary condition for crowd investors' willingness to invest after failure: gender differences among crowd investors. Female investors, in particular, are more sensitive to attribution style, showing a greater preference and, hence, a greater willingness to invest in external and controllable explanations.

While the previous three essays explored the influence of failure on crowd investor decision-making in impact ventures, **Essay IV** takes a step forward to examine the concept of failure itself in the context of impact ventures. Although failure is well-theorized in general entrepreneurship research, its meaning and implications remain underexplored in the domain of impact (i.e., social and sustainable) entrepreneurship, where success-oriented narratives tend to dominate (Bacq et al., 2025; Czakon et al., 2024). To address this gap, Essay IV conducted a comprehensive review of 40 peer-reviewed studies and developed a conceptual synthesis that exposes critical definitional ambiguities and theoretical blind spots in the existing literature of failure. The analysis introduces a multidimensional framework that distinguishes between economic and non-economic types of failure and traces how antecedents and stakeholder reactions evolve across pre- and post-failure phases. Concluding the dissertation with Essay IV expands the scope by moving beyond the narrow focus on a

single stakeholder group, namely crowd investors, that guided the empirical analyses in Essays I–III. By situating failure within a broader and more diverse stakeholder context, Essay IV invites future research to explore how various stakeholder groups react to failure in impact ventures and enhance theory development, thereby contributing to a more inclusive and comprehensive understanding of failure. In summary, the four essays are interconnected in their collective aim to understand how failure is experienced, interpreted, and addressed by crowd investors and diverse stakeholder groups.

## 6.2 Theoretical implications

Drawing from the summarized findings, this dissertation proposes integrated theoretical implications that build upon the following three insights:

First, crowd investor’ reactions to failure are heterogeneous, influenced by their crowdfunding experience, personal values, stereotypes, gender, and failure type. Second, crowd investors’ reactions are based on entrepreneurs’ characteristics, such as gender and attribution strategies in the context of failure. And third, failure is multidimensional and interpreted differently across stakeholder groups. The following discussion outlines how each essay contributes to these three identified key themes.

*(1) Crowd investor reactions to failure are heterogeneous.* Essays I–III advance our theoretical understanding at the intersection of entrepreneurial finance, impact entrepreneurship, and failure by revealing the heterogeneous nature of crowd investors’ responses to failure. This area has rarely been addressed in the extant research (Böckel et al., 2020; Hornuf et al., 2021; McSweeney et al., 2025). In that vein, Essay I challenges the prevailing assumption that crowd investors constitute a uniform evaluative audience (Davis et al., 2017; Dinh & Wehner, 2022), demonstrating that investors’ crowdfunding experience significantly shapes post-failure evaluations and, in turn, investment decisions. Importantly, experienced crowd investors are not uniformly more forgiving among impact ventures

(Lindlar et al., 2025); instead, their interpretations are filtered through self-transcendence values and specific campaign characteristics, thereby aligning with emerging evidence of diversity within investor groups (Bapna & Ganco, 2021). Essay II revealed that crowd investors' reactions differ depending on the type of failure experienced, suggesting that variation in failure exposure meaningfully influences evaluative reactions. Essay III complements this insight by showing that crowd investor gender also shapes decision-making in failure contexts, with female and male investors differing in their reactions to entrepreneurs' attributional reasoning and, consequently, their tolerance for failure. Together, these findings open new avenues for research on failure in the context of impact ventures by emphasizing the need to account for diverse investor characteristics and their respective interpretive lenses.

*(2) Crowd investors' reactions based on entrepreneurs' characteristics.* Building on the heterogeneity of stakeholder characteristics and their reactions to failure, Essays II and III advance research on failure in impact ventures (e.g., McSweeney et al., 2025) by emphasizing that stakeholder reactions are shaped not only by their own characteristics but also by the specific attributes signaled by the entrepreneur. In particular, the findings of Essays II and III underscore that distinct entrepreneurial characteristics can elicit different responses from crowd investors, thereby expanding theoretical understanding of how signals emitted by entrepreneurs are interpreted within evaluative contexts. Among these characteristics, gender emerges as a salient and consequential signal. More specifically, Essay II demonstrated that female entrepreneurs are systematically less likely to secure funding after investment failure, a pattern that is particularly pronounced in the context of social ventures. This finding contrasts with prior research suggesting that, in pre-failure contexts, female-led social ventures often receive favorable evaluations and are more likely to secure funding (Anglin et al., 2022). However, as this dissertation shows, when failure is introduced, this dynamic shift

leads to increased penalization against female entrepreneurs. These results extend the literature on gender and entrepreneurship (Johnson et al., 2018; Koziol et al., 2025) and also call for a broader examination of post-funding outcomes and the repercussions of failure. Beyond gendered signaling, Essay III shows that attributional framing can mitigate crowd investors' negativity in the aftermath of failure. Entrepreneurs who effectively attribute failure to internal, uncontrollable, and stable factors are more likely to preserve or even regain investor support. Findings apply equally to impact and commercial ventures. These findings contribute to research on the influence of strategic signals on crowd investors' willingness to re-engage post-failure (Zunino et al., 2022). Overall, Essays II and III enrich existing theories by elucidating how entrepreneurial characteristics shape stakeholder reactions in the wake of failure, especially in the context of impact ventures.

*(3) Failure is multidimensional and interpreted differently across stakeholder groups.*

Extending the insights from the preceding essays, this dissertation highlights the multifaceted nature of failure, particularly in the context of impact ventures that engage diverse sets of stakeholders. Across the essays, failure is examined from multiple angles: as an investment loss experienced by investors (Essays I and II), as a reputational and evaluative burden by entrepreneurs (Essays II and III), and as a broader phenomenon shaped by social meaning and stakeholder interpretation (Essay IV).

By investigating the crowdlending environment, an increasingly prevalent financing mechanism for impact ventures (e.g., Slimane & Rousseau, 2020; Tenner & Hörisch, 2021), Essays I–III offer an entry point into a topic that remains underexplored in entrepreneurship research. In particular, prior studies have largely focused on the phase up to the point of funding (e.g., Dinh & Wehner, 2022; Penz et al., 2022), overlooking the continued relationship between stakeholders and ventures after successful funding. This neglect also extends to theoretical frameworks used in prior research. For instance, signaling theory,

which has been widely applied in crowdfunding contexts, appears constrained to pre-funding decisions and remains insufficiently adapted to post-funding decisions (Ahlers et al., 2015; Alsos & Ljunggren, 2017).

By moving beyond the assumption that successful funding marks the end of stakeholder–venture interaction, this dissertation contributes to theory development by conceptualizing failure as an ongoing and relational process. Failure takes on different meanings depending on the stakeholder perspective and context, including financial loss for investors, reputational threat for entrepreneurs, and broader social interpretations (e.g. societal empathy and attribution to external factors in the failure of impact ventures; Shepherd & Patzelt, 2015). This post-funding perspective supports the need for more theorizing around failure culture, entrepreneurial learning, and stakeholder sensemaking across both impact and commercial ventures.

In this regard, Essay IV contributes to research by conceptualizing failure not as a singular outcome but as a construct shaped by distinct actor perspectives and interpretive frameworks. This approach advances the entrepreneurship and failure literature (e.g., Czakon et al., 2024; Jenkins & McKelvie, 2016) by foregrounding the complexity inherent in failure experiences and by calling for greater theoretical sensitivity to the multiple meanings and consequences of failure in impact entrepreneurial contexts. Ultimately, Essay IV opens new avenues for examining how failure is constructed and responded to across different stakeholder groups, thereby deepening theoretical engagement with the construct of failure in impact entrepreneurship.

### **6.3 Practical implications**

In the evolving landscape of failure, this dissertation offers several practical implications for entrepreneurs, crowdlending platforms, investors, and policymakers operating at the nexus of finance and impact ventures. A central insight emerging from the

four essays is the need to recognize the heterogeneity of stakeholder responses to failure. Crowd investors differ significantly in how they interpret failure signals, shaped by experience, attributional reasoning, values, and gender. Entrepreneurs can benefit from understanding these differences to design their campaigns and tailor post-failure communication strategies more effectively (e.g., Zunino et al., 2022). For instance, identifying and engaging experienced investors, those who consistently participate in crowdlending, may be advantageous, as they tend to exhibit greater resilience to failure. However, such efforts require particular sensitivity in sectors such as sustainability, where emotional engagement and non-financial motivations often influence investment decisions (e.g., Dinh, Isaak, & Yahyaoui, 2024). Transparency, consistent updates, and targeted communication that stresses long-term impact can help mitigate negative investor responses and maintain trust.

The findings also underscore the importance of gender as both a signal and a lens through which failure is evaluated. Female entrepreneurs, particularly in social ventures, face compounded disadvantages following failure due to intersecting gendered and mission-related stereotypes. Crowdlending platforms can take meaningful steps to reduce bias in investment decisions by anonymizing gender cues during initial assessments, providing education on attribution biases, and using algorithmic tools to enhance the visibility of women-led ventures.

Moreover, the research highlights the significance of attribution framing in shaping post-failure evaluations (e.g., Kibler et al., 2017). Entrepreneurs are encouraged to craft clear, authentic narratives that emphasize learning and adaptation. Furthermore, attention to the gender composition of their crowd investor audience is critical. While male investors may respond positively to internal attributions accompanied by corrective action, female investors may be more receptive to context-sensitive external explanations. However, such tailoring

must remain credible and consistent to avoid undermining trust. Platforms can support this process by offering structured templates for failure explanations and guidelines to improve attribution communication.

Beyond immediate entrepreneurial and platform-level implications, the dissertation contributes to broader societal and political conversations about enabling more sustainable and inclusive futures. In the context of an escalating climate crisis (Joint Research Center, 2025) and deepening economic inequalities, entrepreneurship must be understood not solely as a vehicle for economic returns but also as a critical mechanism for addressing entrenched environmental and social challenges. Yet, ventures pursuing such transformative missions often face structural barriers, particularly when they fail to meet conventional short-term financial expectations. The research presented here demonstrates that failure in such contexts is not merely a financial outcome; it constitutes a potential rupture in the long-term trajectory toward planetary and social well-being. Consequently, there is an urgent need to reconceptualize failure, not as an endpoint, but as a necessary site of learning and adaptation for both entrepreneurs and the systems that surround them.

Within this broader rethinking, crowdlending emerges as a salient financial innovation. It offers decentralized, participatory, and values-driven alternatives to traditional capital allocation mechanisms, challenging hierarchies historically dominated by institutional investors (Escudero et al., 2025; Kim & Hann, 2019). By expanding access to capital and the authority to define venture worthiness, crowdlending democratizes entrepreneurial finance and introduces new possibilities for supporting impact ventures. For policymakers and platform architects, this underscores the necessity of designing environments that support impact entrepreneurship, not despite its risk profile, but precisely because of its potential to catalyze systemic change. As demonstrated in Essays I–IV, such support includes fostering gender-diverse investor communities, advancing educational initiatives that normalize failure

as an integral part of the entrepreneurial process, and cultivating open, critical dialogue about failed ventures.

Taken together, these insights emphasize a broader imperative for entrepreneurship to cultivate entrepreneurial ecosystems that embrace failure as a source of learning and integrate its lessons, thereby fostering more equitable and sustainable innovation pathways. In doing so, this dissertation offers timely and theoretically grounded insights into how entrepreneurship can more effectively respond to the interdependent social, economic, and environmental challenges of the twenty-first century.



## References

- Aguinis, H., & Bradley, K. J. (2014). Best practice recommendations for designing and implementing experimental vignette methodology studies. *Organizational Research Methods, 17*(4), 351–371. <https://doi.org/10.1177/1094428114547952>
- Aguinis, H., Gottfredson, R. K., & Culpepper, S. A. (2013). Best-practice recommendations for estimating cross-level interaction effects using multilevel modeling. *Journal of Management, 39*(6), 1490–1528. <https://doi.org/10.1177/0149206313478188>
- Ahlers, G. K. C., Cumming, D., Günther, C., & Schweizer, D. (2015). Signaling in equity crowdfunding. *Entrepreneurship Theory and Practice, 39*(4), 955–980. <https://doi.org/10.1111/etap.12157>
- Aiman-Smith, L., Scullen, S. E., & Barr, S. H. (2002). Conducting studies of decision making in organizational contexts: A tutorial for policy-capturing and other regression-based techniques. *Organizational Research Methods, 5*(4), 388–414. <https://doi.org/10.1177/109442802237117>
- Al-alawi, A., Amjed, S., Haddoud, M. Y., & Soliman, M. (2025). Re-entry intentions of failed entrepreneurs: The roles of social support and resilience. *Journal of Small Business and Enterprise Development, 32*(2), 411–436. (world). <https://doi.org/10.1108/JSBED-12-2023-0585>
- Allison, T. H., Davis, B. C., Short, J. C., & Webb, J. W. (2015). Crowdfunding in a prosocial microlending environment: Examining the role of intrinsic versus extrinsic cues. *Entrepreneurship Theory and Practice, 39*(1), 53–73. <https://doi.org/10.1111/etap.12108>
- Allison, T. H., Davis, B. C., Webb, J. W., & Short, J. C. (2017). Persuasion in crowdfunding: An elaboration likelihood model of crowdfunding performance. *Journal of Business Venturing, 32*(6), 707–725. <https://doi.org/10.1016/j.jbusvent.2017.09.002>
- Alsos, G. A., & Ljunggren, E. (2017). The role of gender in entrepreneur-investor relationships: A signaling theory approach. *Entrepreneurship Theory and Practice, 41*(4), 567–590. <https://doi.org/10.1111/etp.12226>
- Amankwah-Amoah, J., Khan, Z., Ifere, S. E., Nyuur, R. B., & Khan, H. (2022). Entrepreneurs' learning from business failures: An emerging market perspective. *British Journal of Management, 33*(4), 1735–1756. <https://doi.org/10.1111/1467-8551.12557>

- Amjad, T., Abdul Rani, S. H. B., & Sa'atar, S. B. (2020). Entrepreneurship development and pedagogical gaps in entrepreneurial marketing education. *The International Journal of Management Education*, 18(2), 100379. <https://doi.org/10.1016/j.ijme.2020.100379>
- Anand, A., Argade, P., Barkemeyer, R., & Salignac, F. (2021). Trends and patterns in sustainable entrepreneurship research: A bibliometric review and research agenda. *Journal of Business Venturing*, 36(3), 106092. <https://doi.org/10.1016/j.jbusvent.2021.106092>
- Andersen, S., Hanspal, T., & Nielsen, K. M. (2019). Once bitten, twice shy: The power of personal experiences in risk taking. *Journal of Financial Economics*, 132(3), 97–117. <https://doi.org/10.1016/j.jfineco.2018.10.018>
- Anglin, A. H., Bruton, G. D., & Bielicki, M. (2025). No credit for success, penalized for failure? An examination of entrepreneur race, gender, and prior fundraising track records in crowdfunding. *Entrepreneurship Theory and Practice*, 49(5), 1392–1430. <https://doi.org/10.1177/10422587251347054>
- Anglin, A. H., Courtney, C., & Allison, T. H. (2022). Venturing for others, subject to role expectations? A role congruity theory approach to social venture crowd funding. *Entrepreneurship Theory and Practice*, 46(2), 421–448. <https://doi.org/10.1177/10422587211024545>
- Anglin, A. H., Milanov, H., & Short, J. C. (2023). Religious expression and crowdfunded microfinance success: Insights from role congruity theory. *Journal of Business Ethics*, 185(2), 397–426. <https://doi.org/10.1007/s10551-022-05191-1>
- Anglin, A. H., Short, J. C., Drover, W., Stevenson, R. M., McKenny, A. F., & Allison, T. H. (2018). The power of positivity? The influence of positive psychological capital language on crowdfunding performance. *Journal of Business Venturing*, 33(4), 470–492. <https://doi.org/10.1016/j.jbusvent.2018.03.003>
- Anglin, A. H., Wolfe, M. T., Short, J. C., McKenny, A. F., & Pidduck, R. J. (2018). Narcissistic rhetoric and crowdfunding performance: A social role theory perspective. *Journal of Business Venturing*, 33(6), 780–812. <https://doi.org/10.1016/j.jbusvent.2018.04.004>
- Anokhin, S., Morgan, T., Jones Christensen, L., & Schulze, W. (2023). Local context and post-crisis social venture creation. *Strategic Entrepreneurship Journal*, 17(1), 40–60. <https://doi.org/10.1002/sej.1448>

- Aouni, Z., Hudon, M., Périlleux, A., & Wry, T. (2024). Crowdfunding social ventures: Who will reward (or punish) hybridity? *Entrepreneurship Theory and Practice*, 1191–1222. <https://doi.org/10.1177/10422587231218194>
- Atzmüller, C., & Steiner, P. M. (2010). Experimental vignette studies in survey research. *Methodology: European Journal of Research Methods for the Behavioral and Social Sciences*, 6, 128–138. <https://doi.org/10.1027/1614-2241/a000014>
- Austin, J., Stevenson, H., & Wei-Skillern, J. (2012). Social and commercial entrepreneurship: Same, different, or both? *Revista de Administração*, 47(3), 370–384. <https://doi.org/10.5700/rausp1055>
- Ba, Z., Zhao, Y. (Chris), Zhou, L., & Song, S. (2020). Exploring the donation allocation of online charitable crowdfunding based on topical and spatial analysis: Evidence from the Tencent GongYi. *Information Processing & Management*, 57(6), 102322. <https://doi.org/10.1016/j.ipm.2020.102322>
- Bacq, S., & Alt, E. (2018). Feeling capable *and* valued: A prosocial perspective on the link between empathy and social entrepreneurial intentions. *Journal of Business Venturing*, 33(3), 333–350. <https://doi.org/10.1016/j.jbusvent.2018.01.004>
- Bacq, S., Hartog, C., & Hoogendoorn, B. (2013). A quantitative comparison of social and commercial entrepreneurship: Toward a more nuanced understanding of social entrepreneurship organizations in context. *Journal of Social Entrepreneurship*, 4(1), 40–68. <https://doi.org/10.1080/19420676.2012.758653>
- Bacq, S., Hartog, C., & Hoogendoorn, B. (2016). Beyond the moral portrayal of social entrepreneurs: An empirical approach to who they are and what drives them. *Journal of Business Ethics*, 133(4), 703–718. <https://doi.org/10.1007/s10551-014-2446-7>
- Bacq, S., & Janssen, F. (2011). The multiple faces of social entrepreneurship: A review of definitional issues based on geographical and thematic criteria. *Entrepreneurship & Regional Development*, 23(5–6), 373–403. <https://doi.org/10.1080/08985626.2011.577242>
- Bacq, S., Janssen, F., Sabbatucci, A.-S., & Wuillaume, A. (2025). The dark side of doing good: A guiding framework for advancing research on the negative outcomes of social entrepreneurship. *Small Business Economics*. <https://doi.org/10.1007/s11187-025-01094-3>

- Bafera, J., & Kleinert, S. (2023). Signaling theory in entrepreneurship research: A systematic review and research agenda. *Entrepreneurship Theory and Practice*, 47(6), 2419–2464. <https://doi.org/10.1177/10422587221138489>
- Bai, J., & Gao, Q. (2023). Concealing borrowers' failure history in online P2P lending: A natural experiment. *Decision Sciences*, 55(3), 398–413. <https://doi.org/10.1111/dec.12594>
- Bajtelsmit, D., & Bernasek, A. (1997). Why do women invest differently than men? *Financial Counseling and Planning*, 7. <https://doi.org/10.2139/ssrn.2238>
- Balachandra, L., Briggs, T., Eddleston, K., & Brush, C. (2019). Don't pitch like a girl!: How gender stereotypes influence investor decisions. *Entrepreneurship Theory and Practice*, 43(1), 116–137. <https://doi.org/10.1177/1042258717728028>
- Bandura, A. (1997). *Self-efficacy: The exercise of control* (pp. ix, 604). W H Freeman/Times Books/ Henry Holt & Co.
- Banks, G. C., Woznyj, H. M., Wesslen, R. S., Frear, K. A., Berka, G., Heggstad, E. D., & Gordon, H. L. (2019). Strategic recruitment across borders: An investigation of multinational enterprises. *Journal of Management*, 45(2), 476–509. <https://doi.org/10.1177/0149206318764295>
- Bapna, S. (2017). Complementarity of signals in early-stage equity investment decisions: Evidence from a randomized field experiment. *Management Science*, 65(2), 933–952. <https://doi.org/10.1287/mnsc.2017.2833>
- Bapna, S., & Ganco, M. (2021). Gender gaps in equity crowdfunding: Evidence from a randomized field experiment. *Management Science*, 67(5), 2679–2710. <https://doi.org/10.1287/mnsc.2020.3644>
- Barasinska, N., & Schäfer, D. (2014). Is crowdfunding different? Evidence on the relation between gender and funding success from a German peer-to-peer lending platform. *German Economic Review*, 15(4), 436–452. <https://doi.org/10.1111/geer.12052>
- Barbatsis, G. (2004). Narrative Theory. In *Handbook of Visual Communication*. Routledge.
- Barber, B. M., & Odean, T. (2013). Chapter 22—The behavior of individual investors. In G. M. Constantinides, M. Harris, & R. M. Stulz (Eds.), *Handbook of the Economics of Finance* (Vol. 2, pp. 1533–1570). Elsevier. <https://doi.org/10.1016/B978-0-44-459406-8.00022-6>

- Barber, L. K., Barnes, C. M., & Carlson, K. D. (2013). Random and systematic error effects of insomnia on survey behavior. *Organizational Research Methods*, 16, 616–649. <https://doi.org/10.1177/1094428113493120>
- Bar-Haim, Y., Lamy, D., Pergamin, L., Bakermans-Kranenburg, M. J., & van IJzendoorn, M. H. (2007). Threat related attentional bias in anxious and non anxious individuals: A meta-analytic study. *Psychological Bulletin*, 133(1), 1–24. <https://doi.org/10.1037/0033-2909.133.1.1>
- Baron, R. A. (2008). The role of affect in the entrepreneurial process. *Academy of Management Review*, 33(2), 328–340. <https://doi.org/10.5465/amr.2008.31193166>
- Barrett, L. F., & Bliss-Moreau, E. (2009). She’s emotional. He’s having a bad day: Attributional explanations for emotion stereotypes. *Emotion*, 9(5), 649–658. <https://doi.org/10.1037/a0016821>
- Bartlett, F. C. (1995). *Remembering: A study in experimental and social psychology*.
- Battilana, J., & Lee, M. (2014). Advancing research on hybrid organizing – Insights from the study of social enterprises. *The Academy of Management Annals*, 8. <https://doi.org/10.1080/19416520.2014.893615>
- Battilana, J., Sengul, M., Pache, A.-C., & Model, J. (2015). Harnessing productive tensions in hybrid organizations: The case of work integration social enterprises. *Academy of Management Journal*, 58(6), 1658–1685. <https://doi.org/10.5465/amj.2013.0903>
- Battistella, C., Dangelico, R. M., Nonino, F., & Pessot, E. (2021). How social start-ups avoid being falling stars when developing social innovation. *Creativity and Innovation Management*, 30(2), 320–335. <https://doi.org/10.1111/caim.12431>
- Battisti, E., Troise, C., Salvi, A., & Christofi, M. (2024). Decoding the success of equity crowdfunding: Investment decisions of professional and non-professional investors. *Review of Managerial Science*, 18, 3545–3573. <https://doi.org/10.1007/s11846-024-00725-5>
- Baumeister, R. F., Bratslavsky, E., Muraven, M., & Tice, D. M. (1998). Ego depletion: Is the active self a limited resource? *Journal of Personality and Social Psychology*, 74, 1252–1265. <https://doi.org/10.1037/0022-3514.74.5.1252>
- Beaton, E. E., & Dowin Kennedy, E. (2021). Responding to failure: The promise of market mending for social enterprise. *Public Management Review*, 23(5), 641–664. <https://doi.org/10.1080/14719037.2020.1865438>

- Behl, A., Sampat, B., & Raj, S. (2023). An empirical investigation of repeated donations on crowdfunding platforms during COVID-19. *Annals of Operations Research*, 1–29. <https://doi.org/10.1007/s10479-023-05197-6>
- Bellucci, A., Gucciardi, G., Locatelli, R., & Schena, C.-M. (2025). Gender gap in business angel financing. *Entrepreneurship Research Journal*, 15(2), 289–324. <https://doi.org/10.1515/erj-2023-0246>
- Bento, N., Gianfrate, G., & Groppo, S. V. (2019). Do crowdfunding returns reward risk? Evidences from clean-tech projects. *Technological Forecasting and Social Change*, 141, 107–116. <https://doi.org/10.1016/j.techfore.2018.07.007>
- Bento, N., Gianfrate, G., & Thoni, M. H. (2019). Crowdfunding for sustainability ventures. *Journal of Cleaner Production*, 237, 117751. <https://doi.org/10.1016/j.jclepro.2019.117751>
- Berchicci, L., & Boons, M. (2025). The effect of the degree of early-stage failure on entrepreneurial pivoting and success: Evidence from crowdfunding. *Research Policy*, 54(4), 105206. <https://doi.org/10.1016/j.respol.2025.105206>
- Berns, J. P., Figueroa-Armijos, M., da Motta Veiga, S. P., & Dunne, T. C. (2020). Dynamics of lending-based prosocial crowdfunding: Using a social responsibility lens. *Journal of Business Ethics*, 161(1), 169–185. <https://doi.org/10.1007/s10551-018-3932-0>
- Böckel, A., Hörisch, J., & Tenner, I. (2020). A systematic literature review of crowdfunding and sustainability: Highlighting what really matters. *Management Review Quarterly*, 71(2), 433–453. <https://doi.org/10.1007/s11301-020-00189-3>
- Bocken, N. M. P. (2015). Sustainable venture capital – catalyst for sustainable start-up success? *Journal of Cleaner Production*, 108, 647–658. <https://doi.org/10.1016/j.jclepro.2015.05.079>
- Bort, J., Moss, T. W., & Renko, M. (2024). Legitimacy spillovers and hybrid rhetoric in crowdfunded microloans. *International Small Business Journal*, 42(7), 841–862. <https://doi.org/10.1177/02662426241234563>
- Botelho, T. L., & Chang, M. (2023). The evaluation of founder failure and success by hiring firms: A field experiment. *Organization Science*, 34(1), 484–508. <https://doi.org/10.1287/orsc.2022.1592>
- Bretschneider, U., & Leimeister, J. M. (2017). Not just an ego-trip: Exploring backers' motivation for funding in incentive-based crowdfunding. *The Journal of Strategic Information Systems*, 26(4), 246–260. <https://doi.org/10.1016/j.jsis.2017.02.002>

- Bruton, G., Khavul, S., Siegel, D., & Wright, M. (2015). New financial alternatives in seeding entrepreneurship: Microfinance, crowdfunding, and peer-to-peer innovations. *Entrepreneurship Theory and Practice*, 39(1), 9–26.  
<https://doi.org/10.1111/etap.12143>
- Burgoon, J. K. (2015). Expectancy Violations Theory. In *The International Encyclopedia of Interpersonal Communication* (pp. 1–9). John Wiley & Sons, Ltd.  
<https://doi.org/10.1002/9781118540190.wbeic102>
- Burtch, G., Ghose, A., & Wattal, S. (2014). Cultural differences and geography as determinants of online prosocial lending. *MIS Quarterly*, 38(3), 773–794.  
<https://doi.org/10.25300/MISQ/2014/38.3.07>
- Burtch, G., Ghose, A., & Wattal, S. (2016). Secret admirers: An empirical examination of information hiding and contribution dynamics in online crowdfunding. *Information Systems Research*, 27(3), 478–496. <https://doi.org/10.1287/isre.2016.0642>
- Butticè, V., Collewaert, V., Stroe, S., Vanacker, T., Vismara, S., & Walthoff-Borm, X. (2022). Equity crowdfunders' human capital and signal set formation: Evidence from eye tracking. *Entrepreneurship Theory and Practice*, 46(5), 1317–1343.  
<https://doi.org/10.1177/10422587211026860>
- Butticè, V., Colombo, M. G., & Wright, M. (2017). Serial crowdfunding, social capital, and project success. *Entrepreneurship Theory and Practice*, 41(2), 183–207.  
<https://doi.org/10.1111/etap.12271>
- Butticè, V., Croce, A., & Ughetto, E. (2023). Gender diversity, role congruity and the success of VC investments. *Entrepreneurship Theory and Practice*, 47(5), 1660–1698.  
<https://doi.org/10.1177/10422587221096906>
- Buttner, E. H., & Rosen, B. (1988). Bank loan officers' perceptions of the characteristics of men, women, and successful entrepreneurs. *Journal of Business Venturing*, 3(3), 249–258. [https://doi.org/10.1016/0883-9026\(88\)90018-3](https://doi.org/10.1016/0883-9026(88)90018-3)
- Byrne, O., & Shepherd, D. A. (2015). Different strokes for different folks: Entrepreneurial narratives of emotion, cognition, and making sense of business failure. *Entrepreneurship Theory and Practice*, 39(2), 375–405.  
<https://doi.org/10.1111/etap.12046>
- Calic, G., & Mosakowski, E. (2016). Kicking off social entrepreneurship: How a sustainability orientation influences crowdfunding success: Kicking off social

- entrepreneurship. *Journal of Management Studies*, 53(5), 738–767.  
<https://doi.org/10.1111/joms.12201>
- Cardon, M. S., Stevens, C. E., & Potter, D. R. (2011). Misfortunes or mistakes?: Cultural sensemaking of entrepreneurial failure. *Journal of Business Venturing*, 26(1), 79–92.  
<https://doi.org/10.1016/j.jbusvent.2009.06.004>
- Carter, S., Shaw, E., Lam, W., & Wilson, F. (2007). Gender, entrepreneurship, and bank lending: The criteria and processes used by bank loan officers in assessing applications. *Entrepreneurship Theory and Practice*, 31(3), 427–444.  
<https://doi.org/10.1111/j.1540-6520.2007.00181.x>
- Cervelló-Royo, R., Moya-Clemente, I., Perelló-Marín, M. R., & Ribes-Giner, G. (2020). Sustainable development, economic and financial factors, that influence the opportunity-driven entrepreneurship. An fsQCA approach. *Journal of Business Research*, 115(C), 393–402. <https://doi.org/10.1016/j.jbusres.2019.10.031>
- Chan, C. S. R., & Parhankangas, A. (2017). Crowdfunding innovative ideas: How incremental and radical innovativeness influence funding outcomes. *Entrepreneurship Theory and Practice*, 41(2), 237–263. <https://doi.org/10.1111/etap.12268>
- Charness, G., Gneezy, U., & Kuhn, M. A. (2012). Experimental methods: Between-subject and within-subject design. *Journal of Economic Behavior & Organization*, 81(1), 1–8.  
<https://doi.org/10.1016/j.jebo.2011.08.009>
- Chen, D., Li, X., & Lai, F. (2017). Gender discrimination in online peer-to-peer credit lending: Evidence from a lending platform in China. *Electronic Commerce Research*, 17(4), 553–583. <https://doi.org/10.1007/s10660-016-9247-2>
- Chen, J., Sohl, J. E., & Lien, W.-C. (2023). Angel investors' political ideology and investments in women-owned ventures. *Journal of Business Ethics*, 188(2), 379–396.  
<https://doi.org/10.1007/s10551-022-05302-y>
- Chila, V., Devarakonda, S. V., & Martin, X. (2025). Pre-entry experience, knowledge inheritance, and entrepreneurial resource mobilization. *Small Business Economics*, 65(1), 561–584. <https://doi.org/10.1007/s11187-025-01003-8>
- Choo, F., & Trotman, K. T. (1991). The relationship between knowledge structure and judgments for experienced and inexperienced auditors. *The Accounting Review*, 66(3), 464–485.



- Chu, W., Im, M., & Lee, E.-J. (2014). Investor expertise as mastery over mind: Regulating loss affect for superior investment performance. *Psychology & Marketing*, 31(5), 321–334. <https://doi.org/10.1002/mar.20697>
- Civardi, C., Moro, A., & Winborg, J. (2023). “All that glitters is not gold!”: The (unexplored) determinants of equity crowdfunding. *Small Business Economics*, 63, 299–324. <https://doi.org/10.1007/s11187-023-00813-y>
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences*. Academic Press.
- Cohen, J., Cohen, P., West, S. G., & Aiken, L. S. (2002). *Applied multiple regression/Correlation analysis for the behavioral sciences* (3rd ed.). Routledge. <https://doi.org/10.4324/9780203774441>
- Colombo, M. G., Franzoni, C., & Rossi-Lamastra, C. (2015). Internal social capital and the attraction of early contributions in crowdfunding. *Entrepreneurship: Theory and Practice*, 39(1), 75–100. <https://doi.org/10.1111/etap.12118>
- Connelly, B. L., Certo, S. T., Ireland, R. D., & Reutzel, C. R. (2011). Signaling theory: A review and assessment. *Journal of Management*, 37(1), 39–67. <https://doi.org/10.1177/0149206310388419>
- Conte, B., Brosch, T., & Hahnel, U. J. J. (2023). Initial evidence for a systematic link between core values and emotional experiences in environmental situations. *Journal of Environmental Psychology*, 88, 102026. <https://doi.org/10.1016/j.jenvp.2023.102026>
- Conte, B., Hahnel, U. J. J., & Brosch, T. (2023). From values to emotions: Cognitive appraisal mediates the impact of core values on emotional experience. *Emotion*, 23(4), 1115–1129. <https://doi.org/10.1037/emo0001083>
- Cooper, A. C., & Artz, K. W. (1995). Determinants of satisfaction for entrepreneurs. *Journal of Business Venturing*, 10(6), 439–457. [https://doi.org/10.1016/0883-9026\(95\)00083-K](https://doi.org/10.1016/0883-9026(95)00083-K)
- Cope, J. (2011). Entrepreneurial learning from failure: An interpretative phenomenological analysis. *Journal of Business Venturing*, 26(6), 604–623. <https://doi.org/10.1016/j.jbusvent.2010.06.002>
- Courtney, C., Dutta, S., & Li, Y. (2017). Resolving information asymmetry: Signaling, endorsement, and crowdfunding success. *Entrepreneurship Theory and Practice*, 41(2), 265–290. <https://doi.org/10.1111/etap.12267>
- Croson, R., & Gneezy, U. (2009). Gender differences in preferences. *Journal of Economic Literature*, 47(2), 448–474. <https://doi.org/10.1257/jel.47.2.448>

- Cumming, D., & Hornuf, L. (2022). Marketplace lending of small- and medium-sized enterprises. *Strategic Entrepreneurship Journal*, 16(1), 32–66.  
<https://doi.org/10.1002/sej.1411>
- Cumming, D., & Sewaid, A. (2024). Crowdlending, self-employment, and entrepreneurial performance. *Entrepreneurship Theory and Practice*, 49(2), 403–434.  
<https://doi.org/10.1177/10422587241270596>
- Cummings, M. E., Rawhouser, H., Vismara, S., & Hamilton, E. L. (2020). An equity crowdfunding research agenda: Evidence from stakeholder participation in the rulemaking process. *Small Business Economics*, 54(4), 907–932.  
<https://doi.org/10.1007/s11187-018-00134-5>
- Czaja, D., & Röder, F. (2020). Self-attribution bias and overconfidence among nonprofessional traders. *The Quarterly Review of Economics and Finance*, 78, 186–198. <https://doi.org/10.1016/j.qref.2020.02.003>
- Czakon, W., Klimas, P., Tiberius, V., Ferreira, J., Veiga, P. M., & Kraus, S. (2024). Entrepreneurial failure: Structuring a widely overlooked field of research. *Entrepreneurship Research Journal*, 14(3), 951–984. <https://doi.org/10.1515/erj-2021-0328>
- Dacin, P. A., Dacin, M. T., & Matear, M. (2010). Social entrepreneurship: Why we don't need a new theory and how we move forward from here. *Academy of Management Perspectives*, 24(3), 37–57. <https://doi.org/10.5465/amp.24.3.37>
- Davies, W. E., & Giovannetti, E. (2022). Latent network capital and gender in crowdfunding: Evidence from the Kiva platform. *Technological Forecasting and Social Change*, 182, 121865. <https://doi.org/10.1016/j.techfore.2022.121865>
- Davis, B. C., Hmieleski, K. M., Webb, J. W., & Coombs, J. E. (2017). Funders' positive affective reactions to entrepreneurs' crowdfunding pitches: The influence of perceived product creativity and entrepreneurial passion. *Journal of Business Venturing*, 32(1), 90–106. <https://doi.org/10.1016/j.jbusvent.2016.10.006>
- Davis, M. H. (1980). A multidimensional approach to individual differences in empathy. *JSAS Catalog of Selected Documents in Psychology*, 10, 85.
- de Andrés, P., Gimeno, R., & Mateos de Cabo, R. (2021). The gender gap in bank credit access. *Journal of Corporate Finance*, 71, 101782.  
<https://doi.org/10.1016/j.jcorpfin.2020.101782>

- Del Gaudio, B. L., Lazos, A., & Previtali, D. (2025). Does equity crowdfunding enhance the survival of sustainability ventures? *Finance Research Letters*, 75, 106919. <https://doi.org/10.1016/j.frl.2025.106919>
- Deo, M., & Sundar, V. (2015). Gender difference: Investment behavior and risk taking. *SCMS Journal of Indian Management*, 12(3), 74.
- Diaz-Sarachaga, J. M., & Ariza-Montes, A. (2022). The role of social entrepreneurship in the attainment of the sustainable development goals. *Journal of Business Research*, 152, 242–250. <https://doi.org/10.1016/j.jbusres.2022.07.061>
- Dinh, J. M., Isaak, A. J., & Wehner, M. C. (2024). Sustainability-oriented crowdfunding: An integrative literature review. *Journal of Cleaner Production*, 448, 141579. <https://doi.org/10.1016/j.jclepro.2024.141579>
- Dinh, J. M., Isaak, A. J., & Yahyaoui, Y. (2024). Investing for good – Uncovering crowd investors' motivations to participate in sustainability-oriented crowdlending. *Technological Forecasting and Social Change*, 207, 123584. <https://doi.org/10.1016/j.techfore.2024.123584>
- Dinh, J. M., & Wehner, M. C. (2022). Crowdlending decisions for sustainable new ventures: The role of underlying human values in explaining the heterogeneity of crowd investor preferences. *Journal of Cleaner Production*, 379, 134602. <https://doi.org/10.1016/j.jclepro.2022.134602>
- Donaldson, C., Neck, H., & Linton, G. (2024). Fearful pathways to social entrepreneurship intention: A fuzzy-set qualitative content analysis. *The International Journal of Management Education*, 22(1), 100925. <https://doi.org/10.1016/j.ijme.2023.100925>
- Dorfleitner, G., Hornuf, L., & Weber, M. (2023). Paralyzed by shock: The portfolio formation behavior of peer-to-business lending investors. *Review of Managerial Science*, 17(3), 1037–1073. <https://doi.org/10.1007/s11846-022-00544-6>
- Douglas, B. D., Ewell, P. J., & Brauer, M. (2023). Data quality in online human-subjects research: Comparisons between MTurk, Prolific, CloudResearch, Qualtrics, and SONA. *PLOS ONE*, 18(3), e0279720. <https://doi.org/10.1371/journal.pone.0279720>
- Drencheva, A., Au, W. C., & Li Yew, J. (2023). Working for impact, but failing to experience it: Exploring individuals' sensemaking in social enterprises. *Business & Society*, 62(7), 1458–1495. <https://doi.org/10.1177/00076503221150780>

- Dryden, K. L. (2013). Implicit and explicit gender stereotypes and their relationship to self-concept. [*Undergraduate Honors Thesis, University of North Carolina at Chapel Hill.*] [https://cdr.lib.unc.edu/concern/honors\\_theses/jq085p96x](https://cdr.lib.unc.edu/concern/honors_theses/jq085p96x)
- Duck, S. (1982). A topography of relationship disengagement and dissolution. *Personal Relationships*, 4, 1–30.
- Dushnitsky, G., Guerini, M., Piva, E., & Rossi-Lamastra, C. (2016). Crowdfunding in Europe: Determinants of platform creation across countries. *California Management Review*, 58(2), 44–71. <https://doi.org/10.1525/cmr.2016.58.2.44>
- Eagly, A. H., & Carli, L. L. (2003). The female leadership advantage: An evaluation of the evidence. *The Leadership Quarterly*, 14(6), 807–834. <https://doi.org/10.1016/j.leaqua.2003.09.004>
- Eckardt, R., Skaggs, B. C., & Lepak, D. P. (2018). An examination of the firm-level performance impact of cluster hiring in knowledge-intensive firms. *Academy of Management Journal*, 61(3), 919–944. <https://doi.org/10.5465/amj.2016.0601>
- Eddleston, K. A., Ladge, J. J., Mitteness, C., & Balachandra, L. (2016). Do you see what I see? Signaling effects of gender and firm characteristics on financing entrepreneurial ventures. *Entrepreneurship Theory and Practice*, 40(3), 489–514. <https://doi.org/10.1111/etap.12117>
- Eggers, J. P., & Song, L. (2015). Dealing with failure: Serial entrepreneurs and the costs of changing industries between ventures. *Academy of Management Journal*, 58(6), 1785–1803. <https://doi.org/10.5465/amj.2014.0050>
- Engel, Y., Noordijk, S., Spoelder, A., & van Gelderen, M. (2021). Self-Compassion when coping with venture obstacles: Loving-kindness meditation and entrepreneurial fear of failure. *Entrepreneurship Theory and Practice*, 45(2), 263–290. <https://doi.org/10.1177/1042258719890991>
- Entman, R. M. (1993). Framing: Towards clarification of a fractured paradigm. *McQuail's Reader in Mass Communication Theory*, 390, 397.
- Esau, E., Kannegieser, C. L., Reppmann, M., Piening, E. P., & Edinger-Schons, L. M. (2024). Stairway to impact or highway to failure? A cognitive perspective on business model design processes in nascent sustainable ventures. *Strategic Entrepreneurship Journal*, 1–46. <https://doi.org/10.1002/sej.1531>

- Escudero, S. B., Anglin, A. H., Allison, T. H., & Wolfe, M. T. (2025). Crowdfunding: A theory-centered review and roadmap of the multidisciplinary literature. *Journal of Management*, 52(1), 131–184. <https://doi.org/10.1177/01492063251328267>
- Espinoza-Benavides, J., & Díaz, D. (2019). The entrepreneurial profile after failure. *International Journal of Entrepreneurial Behavior & Research*, 25(8), 1634–1651. <https://doi.org/10.1108/IJEER-04-2018-0242>
- Estrin, S., Mickiewicz, T., & Stephan, U. (2013). Entrepreneurship, social capital, and institutions: Social and commercial entrepreneurship across nations. *Entrepreneurship Theory and Practice*, 37(3), 479–504. <https://doi.org/10.1111/etap.12019>
- Fang He, V., Sirén, C., Singh, S., Solomon, G., & von Krogh, G. (2018). Keep calm and carry on: Emotion regulation in entrepreneurs' learning from failure. *Entrepreneurship Theory and Practice*, 42(4), 605–630. <https://doi.org/10.1177/1042258718783428>
- Fauchart, E., & Gruber, M. (2011). Darwinians, communitarians, and missionaries: The role of founder identity in entrepreneurship. *Academy of Management Journal*, 54(5), 935–957. <https://doi.org/10.5465/amj.2009.0211>
- Faul, F., Erdfelder, E., Buchner, A., & Lang, A.-G. (2009). Statistical power analyses using G\*Power 3.1: Tests for correlation and regression analyses. *Behavior Research Methods*, 41, 1149–1160. <https://doi.org/10.3758/BRM.41.4.1149>
- Fein, S., & Spencer, S. J. (1997). Prejudice as self-image maintenance: Affirming the self through derogating others. *Journal of Personality and Social Psychology*, 73(1), 31–44. <https://doi.org/10.1037/0022-3514.73.1.31>
- Fein, S., von Hippel, W., & Spencer, S. J. (1999). To stereotype or not to stereotype: Motivation and stereotype activation, application, and inhibition. *Psychological Inquiry*, 10(1), 49–54. [https://doi.org/10.1207/s15327965pli1001\\_7](https://doi.org/10.1207/s15327965pli1001_7)
- Fellnhöfer, K., & Deng, Y. (2023). Investor intuition promotes gender equality in access to reward-based crowdfunding. *Entrepreneurship Theory and Practice*, 48(2), 675–718. <https://doi.org/10.1177/10422587231192150>
- Fernández-Guadano, J., & Martín-López, S. (2023). Gender differences in social entrepreneurship: Evidence from Spain. *Women's Studies International Forum*, 96, 102663. <https://doi.org/10.1016/j.wsif.2022.102663>
- Fichter, K., Lüdeke-Freund, F., Schaltegger, S., & Schillebeeckx, S. J. D. (2023). Sustainability impact assessment of new ventures: An emerging field of research.

- Journal of Cleaner Production*, 384, 135452.  
<https://doi.org/10.1016/j.jclepro.2022.135452>
- Fisher, G., Kuratko, D. F., Bloodgood, J. M., & Hornsby, J. S. (2017). Legitimate to whom? The challenge of audience diversity and new venture legitimacy. *Journal of Business Venturing*, 32(1), 52–71. <https://doi.org/10.1016/j.jbusvent.2016.10.005>
- Freeman, R. E., Harrison, J. S., Wicks, A. C., Parmar, B. L., & Colle, S. de. (2010). *Stakeholder Theory: The State of the Art*. Cambridge University Press.
- Frydrych, D., Bock, A. J., Kinder, T., & Koeck, B. (2014). Exploring entrepreneurial legitimacy in reward-based crowdfunding. *Venture Capital*, 16(3), 247–269.  
<https://doi.org/10.1080/13691066.2014.916512>
- Furnham, A., & Boo, H. C. (2011). A literature review of the anchoring effect. *The Journal of Socio-Economics*, 40(1), 35–42. <https://doi.org/10.1016/j.socec.2010.10.008>
- Gafni, H., Hudon, M., & Périlleux, A. (2021). Business or basic needs? The impact of loan purpose on social crowdfunding platforms. *Journal of Business Ethics*, 173(4), 777–793. <https://doi.org/10.1007/s10551-020-04530-4>
- Geiger, M. (2024). Gender effects and firm financial performance: A SUMAD meta-analysis of social responsibility and family-to-work conflict. *Journal of Business Venturing Insights*, 22, e00485. <https://doi.org/10.1016/j.jbvi.2024.e00485>
- Gendolla, G. H. E., & Koller, M. (2001). Surprise and motivation of causal search: How are they affected by outcome valence and importance? *Motivation and Emotion*, 25(4), 327–349. <https://doi.org/10.1023/A:1014867700547>
- Gleasure, R., & Feller, J. (2016). Does heart or head rule donor behaviors in charitable crowdfunding markets? *International Journal of Electronic Commerce*, 20(4), 499–524. <https://doi.org/10.1080/10864415.2016.1171975>
- Goffman, E. (1974). *Frame analysis: An essay on the organization of experience*. Northeastern UP.
- Gompers, P., Kovner, A., Lerner, J., & Scharfstein, D. (2010). Performance persistence in entrepreneurship. *Journal of Financial Economics*, 96(1), 18–32.  
<https://doi.org/10.1016/j.jfineco.2009.11.001>
- Gornall, W., & Strebulaev, I. A. (2024). Gender, race, and entrepreneurship: A randomized field experiment on venture capitalists and angels. *Management Science*, 71(6), 4533–5418. <https://doi.org/10.1287/mnsc.2024.4990>

- Gottschalk, S., & Mueller, B. (2022). A second chance for failed entrepreneurs: A good idea? *Small Business Economics*, 59(2), 745–767. <https://doi.org/10.1007/s11187-021-00584-4>
- Graham, J. F., Stendardi, E. J., Myers, J. K., & Graham, M. J. (2002). Gender differences in investment strategies: An information processing perspective. *International Journal of Bank Marketing*, 20(1), 17–26. <https://doi.org/10.1108/02652320210415953>
- Graham, S. (1991). A review of attribution theory in achievement contexts. *Educational Psychology Review*, 3(1), 5–39. <https://doi.org/10.1007/BF01323661>
- Granados, M. L., Rosli, A., & Gotsi, M. (2022). Staying poor: Unpacking the process of barefoot institutional entrepreneurship failure. *Journal of Business Venturing*, 37(3), 106204. <https://doi.org/10.1016/j.jbusvent.2022.106204>
- GrandViewResearch. (2022). *Crowdfunding market size & share analysis report, 2030*. <https://www.grandviewresearch.com/industry-analysis/crowdfunding-market-report>
- GrandViewResearch. (2026). *Crowdfunding market size and share | Industry report, 2030*. <https://www.grandviewresearch.com/industry-analysis/crowdfunding-market-report>
- Green, P. E., & Srinivasan, V. (1978). Conjoint analysis in consumer research: Issues and outlook. *Journal of Consumer Research*, 5(2), 103–123. <https://doi.org/10.1086/208721>
- Greenberg, J., & Mollick, E. (2017). Activist choice homophily and the crowdfunding of female founders. *Administrative Science Quarterly*, 62(2), 341–374. <https://doi.org/10.1177/0001839216678847>
- Greenwald, A. G., & Banaji, M. R. (1995). Implicit social cognition: Attitudes, self-esteem, and stereotypes. *Psychological Review*, 102(1), 4–27. <https://doi.org/10.1037/0033-295X.102.1.4>
- Grimes, M. G., Williams, T. A., & Zhao, E. Y. (2020). Beyond hybridity: Accounting for the values complexity of all organizations in the study of mission and mission drift. *Academy of Management Review*, 45(1), 234–238. <https://doi.org/10.5465/amr.2019.0209>
- Günzel-Jensen, F., & Rask, M. (2021). Combating climate change through collaborations? Lessons learnt from one of the biggest failures in environmental entrepreneurship. *Journal of Cleaner Production*, 278, 123941. <https://doi.org/10.1016/j.jclepro.2020.123941>

- Gupta, V. K., Turban, D. B., & Bhawe, N. M. (2008). The effect of gender stereotype activation on entrepreneurial intentions. *Journal of Applied Psychology, 93*(5), 1053–1061. <https://doi.org/10.1037/0021-9010.93.5.1053>
- Gupta, V. K., Turban, D. B., & Pareek, A. (2013). Differences between men and women in opportunity evaluation as a function of gender stereotypes and stereotype activation. *Entrepreneurship Theory and Practice, 37*(4), 771–788. <https://doi.org/10.1111/j.1540-6520.2012.00512.x>
- Gupta, V. K., Turban, D. B., Wasti, S. A., & Sikdar, A. (2009). The role of gender stereotypes in perceptions of entrepreneurs and intentions to become an entrepreneur. *Entrepreneurship Theory and Practice, 33*(2), 397–417. <https://doi.org/10.1111/j.1540-6520.2009.00296.x>
- Gupta, V. K., Wieland, A. M., & Turban, D. B. (2019). Gender characterizations in entrepreneurship: A multi-level investigation of sex-role stereotypes about high-growth, commercial, and social entrepreneurs. *Journal of Small Business Management, 57*(1), 131–153. <https://doi.org/10.1111/jsbm.12495>
- Haghighat, R. (2007). The development of the brief social desirability scale (BSDS). *Europe's Journal of Psychology, 3*(4). <https://doi.org/10.5964/ejop.v3i4.417>
- Hambrick, D. C., & Mason, P. A. (1984). Upper echelons: The organization as a reflection of its top managers. *The Academy of Management Review, 9*(2), 193–206. <https://doi.org/10.2307/258434>
- Hao, X., Hu, F., & Li, Z. (2024). Entrepreneur-investor gender match effects in startup funding: Evidence from an entrepreneurial-themed reality TV show in China. *International Review of Economics & Finance, 93*, 811–832. <https://doi.org/10.1016/j.iref.2024.03.038>
- Harrison, R. T., Botelho, T., & Mason, C. M. (2020). Women on the edge of a breakthrough? A stereotype threat theory of women's angel investing. *International Small Business Journal: Researching Entrepreneurship, 38*(8), 768–797. <https://doi.org/10.1177/0266242620927312>
- Harvey, P., Madison, K., Martinko, M., Crook, T. R., & Crook, T. A. (2014). Attribution theory in the organizational sciences: The road traveled and the path ahead. *Academy of Management Perspectives, 28*(2), 128–146. <https://doi.org/10.5465/amp.2012.0175>
- Hayes, A. F. (2006). A primer on multilevel modeling. *Human Communication Research, 32*(4), 385–410. <https://doi.org/10.1111/j.1468-2958.2006.00281.x>



- Hazan, C., & Shaver, P. (2017). Romantic love conceptualized as an attachment process. In *Interpersonal development* (pp. 283–296). Routledge.
- Heider, F. (1958). *The psychology of interpersonal relations* (pp. ix, 326). John Wiley & Sons Inc. <https://doi.org/10.1037/10628-000>
- Herman, J. L. (2015). *Trauma and recovery: The aftermath of violence—from domestic abuse to political terror*. Basic Books/ Hacette Book Group.
- Hervé, F., Manthé, E., Sannajust, A., & Schwienbacher, A. (2019). Determinants of individual investment decisions in investment-based crowdfunding. *Journal of Business Finance & Accounting*, 46(5–6), 762–783. <https://doi.org/10.1111/jbfa.12372>
- Hochberg, Y. V., Ljungqvist, A., & Vissing-Jørgensen, A. (2014). Informational holdup and performance persistence in venture capital. *The Review of Financial Studies*, 27(1), 102–152. <https://doi.org/10.1093/rfs/hht046>
- Hoegen, A., Steininger, D. M., & Veit, D. (2018). How do investors decide? An interdisciplinary review of decision-making in crowdfunding. *Electronic Markets*, 28(3), 339–365. <https://doi.org/10.1007/s12525-017-0269-y>
- Holden, S. T., & Tilahun, M. (2022). Are risk preferences explaining gender differences in investment behavior? *Journal of Behavioral and Experimental Economics*, 101, 101949. <https://doi.org/10.1016/j.socec.2022.101949>
- Homsma, G. J., Van Dyck, C., De Gilder, D., Koopman, P. L., & Elfring, T. (2007). Overcoming errors: A closer look at the attributional mechanism. *Journal of Business and Psychology*, 21(4), 559–583. <https://doi.org/10.1007/s10869-007-9041-1>
- Hoogendoorn, B., van der Zwan, P., & Thurik, R. (2019). Sustainable entrepreneurship: The role of perceived barriers and risk. *Journal of Business Ethics*, 157(4), 1133–1154. <https://doi.org/10.1007/s10551-017-3646-8>
- Hörisch, J. (2019). Take the money and run? Implementation and disclosure of environmentally-oriented crowdfunding projects. *Journal of Cleaner Production*, 223, 127–135. <https://doi.org/10.1016/j.jclepro.2019.03.100>
- Hörisch, J., & Tenner, I. (2020). How environmental and social orientations influence the funding success of investment-based crowdfunding: The mediating role of the number of funders and the average funding amount. *Technological Forecasting and Social Change*, 161, 120311. <https://doi.org/10.1016/j.techfore.2020.120311>

- Hornuf, L., Schmitt, M., & Stenzhorn, E. (2020). *Does a local bias exist in equity crowdfunding?* (Max Planck Institute for Innovation & Competition Research Paper No. 3555581). <https://doi.org/10.2139/ssrn.3555581>
- Hornuf, L., & Siemroth, C. (2023). A field experiment on attracting crowdfunders. *Economics Letters*, 222, 110928. <https://doi.org/10.1016/j.econlet.2022.110928>
- Hornuf, L., Stenzhorn, E., & Vintis, T. (2021). Are sustainability-oriented investors different? Evidence from equity crowdfunding. *The Journal of Technology Transfer*, 47(6), 1662–1689. <https://doi.org/10.1007/s10961-021-09896-9>
- Howell, S. T., & Nanda, R. (2024). Networking frictions in venture capital, and the gender gap in entrepreneurship. *Journal of Financial and Quantitative Analysis*, 59(6), 2733–2761. <https://doi.org/10.1017/S0022109023000819>
- Hox, J. J. (2002). *Multilevel analysis*. Erlbaum.
- Hsu, D. K., Simmons, S. A., & Wieland, A. M. (2017). Designing entrepreneurship experiments: A review, typology, and research agenda. *Organizational Research Methods*, 20(3), 379–412. <https://doi.org/10.1177/1094428116685613>
- Huang, J., & Kisgen, D. J. (2013). Gender and corporate finance: Are male executives overconfident relative to female executives? *Journal of Financial Economics*, 108(3), 822–839. <https://doi.org/10.1016/j.jfineco.2012.12.005>
- Huang, J. L., Curran, P. G., Keeney, J., Poposki, E. M., & DeShon, R. P. (2012). Detecting and deterring insufficient effort responding to surveys. *Journal of Business and Psychology*, 27(1), 99–114. <https://doi.org/10.1007/s10869-011-9231-8>
- Huang, S., Pickernell, D., Battisti, M., & Nguyen, T. (2022). Signalling entrepreneurs' credibility and project quality for crowdfunding success: Cases from the Kickstarter and Indiegogo environments. *Small Business Economics*, 58(4), 1801–1821. <https://doi.org/10.1007/s11187-021-00477-6>
- Iyer, R., Khwaja, A. I., Luttmer, E. F. P., & Shue, K. (2015). Screening peers softly: Inferring the quality of small borrowers. *Management Science*, 62(6), 1554–1577. <https://doi.org/10.1287/mnsc.2015.2181>
- Jamil, S. A., & Khan, K. (2016). Does gender difference impact investment decisions? Evidence from Oman. *International Journal of Economics and Financial Issues*, 6(2), 456–460.
- Jenkins, A., Achtenhagen, L., & Hellerstedt, K. (2024). Back to work? How employers perceive applicants' experience of entrepreneurial failure. *Entrepreneurship &*

- Regional Development*, 36(5–6), 659–680.  
<https://doi.org/10.1080/08985626.2023.2277791>
- Jenkins, A., & McKelvie, A. (2016). What is entrepreneurial failure? Implications for future research. *International Small Business Journal*, 34(2), 176–188.  
<https://doi.org/10.1177/0266242615574011>
- Jenkins, A., Wiklund, J., & Brundin, E. (2014). Individual responses to firm failure: Appraisals, grief, and the influence of prior failure experience. *Journal of Business Venturing*, 29(1), 17–33. <https://doi.org/10.1016/j.jbusvent.2012.10.006>
- Jennings, J. E., & Tonoyan, V. (2022). Research on gender stereotyping and entrepreneurship: Suggestions for some paths worth pursuing. *Entrepreneurship Research Journal*, 12(3), 187–212. <https://doi.org/10.1515/erj-2022-0235>
- Johnsen, C. G., & Lenhard, J. (2025). Navigating the ambiguity of impact investing: How impact venture capitalists access new markets, founders, and capital. *Journal of Business Ethics*, 203, 165–179. <https://doi.org/10.1007/s10551-025-06053-2>
- Johnson, M. A., Stevenson, R. M., & Letwin, C. R. (2018). A woman's place is in the... Startup! Crowdfunder judgments, implicit bias, and the stereotype content model. *Journal of Business Venturing*, 33(6), 813–831.  
<https://doi.org/10.1016/j.jbusvent.2018.04.003>
- Joint Research Center. (2025). *G20 climate strategies insufficient to meet Paris Agreement goals - The Joint Research Centre: EU Science Hub*. [https://joint-research-centre.ec.europa.eu/jrc-news-and-updates/g20-climate-strategies-insufficient-meet-paris-agreement-goals-2025-01-31\\_en](https://joint-research-centre.ec.europa.eu/jrc-news-and-updates/g20-climate-strategies-insufficient-meet-paris-agreement-goals-2025-01-31_en)
- Justo, R., DeTienne, D. R., & Sieger, P. (2015). Failure or voluntary exit? Reassessing the female underperformance hypothesis. *Journal of Business Venturing*, 30(6), 775–792.  
<https://doi.org/10.1016/j.jbusvent.2015.04.004>
- Kachlami, H. (2017). Regional dynamism between social and commercial ventures: An empirical study based on Swedish data. *International Journal of Social Economics*, 44(9), 1122–1138. <https://doi.org/10.1108/IJSE-11-2015-0293>
- Kahneman, D., & Tversky, A. (1979). Prospect theory: An analysis of decision under risk. *Econometrica*, 47(2), 263. <https://doi.org/10.2307/1914185>
- Kanze, D., Conley, M. A., Okimoto, T. G., Phillips, D. J., & Merluzzi, J. (2020). Evidence that investors penalize female founders for lack of industry fit. *Science Advances*, 6(48), eabd7664. <https://doi.org/10.1126/sciadv.abd7664>

- Kanze, D., Huang, L., Conley, M. A., & Higgins, E. T. (2018). We ask men to win and women not to lose: Closing the gender gap in startup funding. *Academy of Management Journal*, 61, 586–614. <https://doi.org/10.5465/amj.2016.1215>
- Karren, R. J., & Barringer, M. W. (2002). A review and analysis of the policy-capturing methodology in organizational research: Guidelines for research and practice. *Organizational Research Methods*, 5(4), 337–361. <https://doi.org/10.1177/109442802237115>
- Kelley, H. H. (1967). Attribution theory in social psychology. *Nebraska Symposium on Motivation*. <https://psycnet.apa.org/record/1968-13540-001>
- Kgoroadira, R., Burke, A., & van Stel, A. (2019). Small business online loan crowdfunding: Who gets funded and what determines the rate of interest? *Small Business Economics*, 52(1), 67–87. <https://doi.org/10.1007/s11187-017-9986-z>
- Khurana, I., & Lee, D. J. (2023). Gender bias in high stakes pitching: An NLP approach. *Small Business Economics*, 60(2), 485–502. <https://doi.org/10.1007/s11187-021-00598-y>
- Kibler, E., Mandl, C., Farny, S., & Salmivaara, V. (2021). Post-failure impression management: A typology of entrepreneurs' public narratives after business closure. *Human Relations*, 74(2), 286–318. <https://doi.org/10.1177/0018726719899465>
- Kibler, E., Mandl, C., Kautonen, T., & Berger, E. S. C. (2017). Attributes of legitimate venture failure impressions. *Journal of Business Venturing*, 32(2), 145–161. <https://doi.org/10.1016/j.jbusvent.2017.01.003>
- Kickstarter. (2023). *How do I include images or other media in my project description and updates?* <https://help.kickstarter.com/hc/en-us/articles/115005128534-How-do-I-include-images-or-other-media-in-my-project-description-and-updates->
- Kim, K., & Hann, I.-H. (2019). Crowdfunding and the democratization of access to capital—An illusion? Evidence from housing prices. *Information Systems Research*, 30(1), 276–290. <https://doi.org/10.1287/isre.2018.0802>
- Kim, K., & Viswanathan, S. (2019). The experts in the crowd: The role of experienced investors in a crowdfunding market. *Management Information Systems Quarterly*, 43(2), 347–372. <https://doi.org/10.25300/MISQ/2019/13758>
- Klarin, A., & Suseno, Y. (2023). An integrative literature review of social entrepreneurship research: Mapping the literature and future research directions. *Business & Society*, 62(3), 565–611. <https://doi.org/10.1177/00076503221101611>

- Kleinert, S., Bafera, J., Urbig, D., & Volkmann, C. K. (2022). Access denied: How equity crowdfunding platforms use quality signals to select new ventures. *Entrepreneurship Theory and Practice*, 46(6), 1626–1657. <https://doi.org/10.1177/10422587211011945>
- Kleinert, S., & Mochkabadi, K. (2022). Gender stereotypes in equity crowdfunding: The effect of gender bias on the interpretation of quality signals. *The Journal of Technology Transfer*, 47(6), 1640–1661. <https://doi.org/10.1007/s10961-021-09892-z>
- Klimas, P., Czakon, W., Kraus, S., Kailer, N., & Maalaoui, A. (2020). Entrepreneurial failure: A synthesis and conceptual framework of its effects. *European Management Review*, 18(1). <https://doi.org/10.1111/emre.12426>
- Koestner, M., Loos, B., Meyer, S., & Hackethal, A. (2017). Do individual investors learn from their mistakes? *Journal of Business Economics*, 87(5), 669–703. <https://doi.org/10.1007/s11573-017-0855-7>
- Kolbe, M., Mansouri, S., & Momtaz, P. P. (2022). Why do video pitches matter in crowdfunding? *Journal of Economics and Business*, 122, 106081. <https://doi.org/10.1016/j.jeconbus.2022.106081>
- Kollenda, P. (2022). Financial returns or social impact? What motivates impact investors' lending to firms in low-income countries. *Journal of Banking and Finance*, 136, 106224. <https://doi.org/10.1016/j.jbankfin.2021.106224>
- Koziol, K., Schmitz, M., & Bort, S. (2025). Gender differences in entrepreneurial equity financing—A systematic literature review. *Small Business Economics*, 65(1), 231–286. <https://doi.org/10.1007/s11187-024-00989-x>
- Kraus, S., Breier, M., & Dasí-Rodríguez, S. (2020). The art of crafting a systematic literature review in entrepreneurship research. *International Entrepreneurship and Management Journal*, 16(3), 1023–1042. <https://doi.org/10.1007/s11365-020-00635-4>
- Kroeger, A., & Weber, C. (2014). Developing a conceptual framework for comparing social value creation. *Academy of Management Review*, 39(4), 513–540. <https://doi.org/10.5465/amr.2012.0344>
- Kuckertz, A., Berger, E. S. C., & Prochotta, A. (2020). Misperception of entrepreneurship and its consequences for the perception of entrepreneurial failure – the German case. *International Journal of Entrepreneurial Behavior & Research*, 26(8), 1865–1885. <https://doi.org/10.1108/IJEBr-02-2020-0060>

- Kühberger, A., Schulte-Mecklenbeck, M., & Perner, J. (2002). Framing decisions: Hypothetical and real. *Organizational Behavior and Human Decision Processes*, 89, 1162–1175. [https://doi.org/10.1016/S0749-5978\(02\)00021-3](https://doi.org/10.1016/S0749-5978(02)00021-3)
- Kumar Hota, P., Manoharan, B., Rakshit, K., & Panigrahi, P. (2023). Hybrid organization deconstructed: A bibliographic investigation into the origins, development, and future of the research domain. *International Journal of Management Reviews*, 25(2), 384–409. <https://doi.org/10.1111/ijmr.12314>
- Kunda, Z., & Sinclair, L. (1999). Motivated reasoning with stereotypes: Activation, application, and inhibition. *Psychological Inquiry*, 10(1), 12–22. [https://doi.org/10.1207/s15327965pli1001\\_2](https://doi.org/10.1207/s15327965pli1001_2)
- Kunda, Z., & Spencer, S. J. (2003). When do stereotypes come to mind and when do they color judgment? A goal-based theoretical framework for stereotype activation and application. *Psychological Bulletin*, 129(4), 522–544. <https://doi.org/10.1037/0033-2909.129.4.522>
- Kung, F. Y. H., Kwok, N., & Brown, D. J. (2018). Are attention check questions a threat to scale validity? *Applied Psychology: An International Review*, 67, 264–283. <https://doi.org/10.1111/apps.12108>
- Kurz, K., Bock, C., & Hanschur, L. (2024). Flip the tweet – the two-sided coin of entrepreneurial empathy and its ambiguous influence on new product development. *Journal of Business Venturing*, 39(2), 106378. <https://doi.org/10.1016/j.jbusvent.2023.106378>
- Küsshauer, A., & Baum, M. (2020). Blaming yourself or the circumstance? Entrepreneurial failure narratives in job interviews. *Academy of Management Proceedings*, 2020(1), 13118. <https://doi.org/10.5465/AMBPP.2020.13118abstract>
- Lafuente, E., Vaillant, Y., Vendrell-Herrero, F., & Gomes, E. (2018). Bouncing back from failure: Entrepreneurial resilience and the internationalisation of subsequent ventures created by serial entrepreneurs. *Applied Psychology*, 68, 658–694. <https://doi.org/10.1111/apps.12175>
- Laguía, A., García-Ael, C., Wach, D., & Moriano, J. A. (2019). “Think entrepreneur - think male”: A task and relationship scale to measure gender stereotypes in entrepreneurship. *International Entrepreneurship and Management Journal*, 15(3), 749–772. <https://doi.org/10.1007/s11365-018-0553-0>

- Latané, B. (1981). The psychology of social impact. *American Psychologist*, 36(4), 343–356. <https://doi.org/10.1037/0003-066X.36.4.343>
- Lee, C. H., & Chiravuri, A. (2019). Dealing with initial success versus failure in crowdfunding market: Serial crowdfunding, changing strategies, and funding performance. *Internet Research*, 29(5), 1190–1212. <https://doi.org/10.1108/INTR-03-2018-0132>
- Lee, C. K., Simmons, S. A., Amezcua, A., Lee, J. Y., & Lumpkin, G. T. (2022). Moderating effects of informal institutions on social entrepreneurship activity. *Journal of Social Entrepreneurship*, 13(3), 340–365. <https://doi.org/10.1080/19420676.2020.1782972>
- Lee, C. K., Wiklund, J., Amezcua, A., Bae, T. J., & Palubinskas, A. (2022). Business failure and institutions in entrepreneurship: A systematic review and research agenda. *Small Business Economics*, 58(4), 1997–2023. <https://doi.org/10.1007/s11187-021-00495-4>
- Lee, F., & Robinson, R. J. (2000). An attributional analysis of social accounts: Implications of playing the blame game. *Journal of Applied Social Psychology*, 30(9), 1853–1879. <https://doi.org/10.1111/j.1559-1816.2000.tb02472.x>
- Lee, F., & Tiedens, L. Z. (2001). Who's being served? "Self-serving" attributions in social hierarchies. *Organizational Behavior and Human Decision Processes*, 84(2), 254–287. <https://doi.org/10.1006/obhd.2000.2925>
- Lee, H., Shah, S. K., & Agarwal, R. (2024). Spinning an entrepreneurial career: Motivation, attribution, and the development of organizational capabilities. *Strategic Management Journal*, 45(3), 463–506. <https://doi.org/10.1002/smj.3561>
- Lee, M., & Huang, L. (2018). Gender bias, social impact framing, and evaluation of entrepreneurial ventures. *Organization Science*, 29(1), 1–16. <https://doi.org/10.1287/orsc.2017.1172>
- Lewis, M., Takai-Kawakami, K., Kawakami, K., & Sullivan, M. W. (2010). Cultural differences in emotional responses to success and failure. *International Journal of Behavioral Development*, 34(1), 53–61. <https://doi.org/10.1177/0165025409348559>
- Liang, X., Hu, X., Li, E. Y., & Meng, H. (2023). Untangling the influence of perceived sustainability orientation on value-co-creation behavior in crowdfunding process: Investigating a mediation model. *Internet Research*. <https://doi.org/10.1108/INTR-12-2021-0921>

- Lindlar, C., & Jakob, E. A. (2024). Gender bias after failure—How crowd lenders disadvantage female-led social ventures. *Academy of Management Proceedings*, 2024(1), 12379. <https://doi.org/10.5465/AMPROC.2024.12379abstract>
- Lindlar, C., Jakob, E. A., Dinh, J. M., & Wehner, M. C. (2025). Failure signals in sustainable crowdfunding: Distinct reactions driven by crowd investors' experience. *Small Business Economics*, 65, 1877–1907. <https://doi.org/10.1007/s11187-025-01075-6>
- Loewenstein, G., & Issacharoff, S. (1994). Source dependence in the valuation of objects. *Journal of Behavioral Decision Making*, 7(3), 157–168. <https://doi.org/10.1002/bdm.3960070302>
- Lohrke, F. T., Holloway, B. B., & Woolley, T. W. (2010). Conjoint analysis in entrepreneurship research: A review and research agenda. *Organizational Research Methods*, 13(1), 16–30. <https://doi.org/10.1177/1094428109341992>
- Lumpkin, G. T., Moss, T. W., Gras, D. M., Kato, S., & Amezcua, A. S. (2013). Entrepreneurial processes in social contexts: How are they different, if at all? *Small Business Economics*, 40(3), 761–783. <https://doi.org/10.1007/s11187-011-9399-3>
- Mair, J., & Martí, I. (2006). Social entrepreneurship research: A source of explanation, prediction, and delight. *Journal of World Business*, 41(1), 36–44. <https://doi.org/10.1016/j.jwb.2005.09.002>
- Makki, R. F. A., & Van Hemmen, S. (2022). Reinvesting in equity crowdfunding: The case of digital workers. *Journal of Economics, Finance and Administrative Science*, 27(54), 394–411. <https://doi.org/10.1108/JEFAS-07-2021-0116>
- Malmström, M., Voitkane, A., Johansson, J., & Wincent, J. (2020). What do they think and what do they say? Gender bias, entrepreneurial attitude in writing and venture capitalists' funding decisions. *Journal of Business Venturing Insights*, 13, e00154. <https://doi.org/10.1016/j.jbvi.2019.e00154>
- Mandl, C., Berger, E. S., & Kuckertz, A. (2016). Do you plead guilty? Exploring entrepreneurs' sensemaking-behavior link after business failure. *Journal of Business Venturing Insights*, 5, 9–13. <https://doi.org/10.1016/j.jbvi.2015.12.002>
- Mantere, S., Aula, P., Schildt, H., & Vaara, E. (2013). Narrative attributions of entrepreneurial failure. *Journal of Business Venturing*, 28(4), 459–473. <https://doi.org/10.1016/j.jbusvent.2012.12.001>
- March, J. G., & Simon, H. (1958). *Organizations*. New York: Wiley.



- Marinelli, N., Mazzoli, C., & Palmucci, F. (2017). How does gender really affect investment behavior? *Economics Letters*, 151, 58–61.  
<https://doi.org/10.1016/j.econlet.2016.12.006>
- Marshall, D. R., Meek, W. R., Swab, R. G., & Markin, E. (2020). Access to resources and entrepreneurial well-being: A self-efficacy approach. *Journal of Business Research*, 120, 203–212. <https://doi.org/10.1016/j.jbusres.2020.08.015>
- Martin, B., Walsh, L., Keating, A., & Geiger, S. (2024). The demise of a rising social enterprise for persons with disabilities: The ethics and the uncertainty of pure effectual logic when scaling up. *Journal of Business Ethics*, 191(1), 107–130.  
<https://doi.org/10.1007/s10551-023-05390-4>
- Martinko, M. J., Harvey, P., & Douglas, S. C. (2007). The role, function, and contribution of attribution theory to leadership: A review. *The Leadership Quarterly*, 18(6), 561–585.  
<https://doi.org/10.1016/j.leaqua.2007.09.004>
- Mason, C., & Stark, M. (2004). What do investors look for in a business plan?: A comparison of the investment criteria of bankers, venture capitalists and business angels. *International Small Business Journal*, 22(3), 227–248.  
<https://doi.org/10.1177/0266242604042377>
- Maute, M. F., & Dubés, L. (1999). Patterns of emotional responses and behavioural consequences of dissatisfaction. *Applied Psychology*, 48(3), 349–366.  
<https://doi.org/10.1111/j.1464-0597.1999.tb00006.x>
- McSweeney, J. J., McSweeney, K. T., Allison, T. H., & Webb, J. W. (2025). Is prior failure a burden for entrepreneurs' follow-up crowdfunding success?: An expectancy violations theory perspective. *Entrepreneurship Theory and Practice*, 49(5), 1431–1469.  
<https://doi.org/10.1177/10422587251345139>
- Menkhoff, L., & Sakha, S. (2016). Assessing risk attitude: The benefits of pooling measures. *DIW Economic Bulletin*, 6(40/42), 483–490.
- Messenì Petruzzelli, A., Natalicchio, A., Panniello, U., & Roma, P. (2019). Understanding the crowdfunding phenomenon and its implications for sustainability. *Technological Forecasting and Social Change*, 141, 138–148.  
<https://doi.org/10.1016/j.techfore.2018.10.002>
- Meyers-Levy, J., & Maheswaran, D. (1991). Exploring differences in males' and females' processing strategies. *Journal of Consumer Research*, 18(1), 63–70.  
<https://doi.org/10.1086/209241>

- Mikulincer, M., & Shaver, P. R. (2001). Attachment theory and intergroup bias: Evidence that priming the secure base schema attenuates negative reactions to out-groups. *Journal of Personality and Social Psychology*, 81(1), 97–115. <https://doi.org/10.1037/0022-3514.81.1.97>
- Mikulincer, M., & Shaver, P. R. (2007). *Attachment in adulthood: Structure, dynamics, and change*. The Guilford Press.
- Mittal, M., & Vyas, R. K. (2009). Do women differ in their investment information processing style? *Indian Journal of Gender Studies*, 16(1), 99–108. <https://doi.org/10.1177/097152150801600105>
- Mochkabadi, K., & Volkmann, C. K. (2020). Equity crowdfunding: A systematic review of the literature. *Small Business Economics*, 54(1), 75–118. <https://doi.org/10.1007/s11187-018-0081-x>
- Mohammadi, A., & Shafi, K. (2018). Gender differences in the contribution patterns of equity-crowdfunding investors. *Small Business Economics*, 50(2), 275–287. <https://doi.org/10.1007/s11187-016-9825-7>
- Mollick, E. (2014). The dynamics of crowdfunding: An exploratory study. *Journal of Business Venturing*, 29(1), 1–16. <https://doi.org/10.1016/j.jbusvent.2013.06.005>
- Moss, T. W., Renko, M., Block, E., & Meyskens, M. (2018). Funding the story of hybrid ventures: Crowdfunder lending preferences and linguistic hybridity. *Journal of Business Venturing*, 33(5), 643–659. <https://doi.org/10.1016/j.jbusvent.2017.12.004>
- Moss, T. W., Short, J. C., Payne, G. T., & Lumpkin, G. T. (2011). Dual identities in social ventures: An exploratory study. *Entrepreneurship Theory and Practice*, 35(4), 805–830. <https://doi.org/10.1111/j.1540-6520.2010.00372.x>
- Moysidou, K., & Spaeth, S. (2016). *Cognition, emotion and perceived values in crowdfunding decision making*. Open and User Innovation Conference.
- Mueller, B. A., & Shepherd, D. A. (2016). Making the most of failure experiences: Exploring the relationship between business failure and the identification of business opportunities. *Entrepreneurship Theory and Practice*, 40(3), 457–487. <https://doi.org/10.1111/etap.12116>
- Mueller, S. L., & Conway Dato-on, M. (2013). A cross cultural study of gender-role orientation and entrepreneurial self-efficacy. *International Entrepreneurship and Management Journal*, 9(1), 1–20. <https://doi.org/10.1007/s11365-011-0187-y>

- Müller, S., Kirst, A. L., Bergmann, H., & Bird, B. (2023). Entrepreneurs' actions and venture success: A structured literature review and suggestions for future research. *Small Business Economics*, 60(1), 199–226. <https://doi.org/10.1007/s11187-022-00644-3>
- Muñoz, P., Cacciotti, G., & Ucbasaran, D. (2020). Failing and exiting in social and commercial entrepreneurship: The role of situated cognition. *Journal of Business Venturing Insights*, 14, e00196. <https://doi.org/10.1016/j.jbvi.2020.e00196>
- Nielsen, K. R., & Binder, J. K. (2021). I am what I pledge: The importance of value alignment for mobilizing backers in reward-based crowdfunding. *Entrepreneurship Theory and Practice*, 45(3), 531–561. <https://doi.org/10.1177/1042258720929888>
- Njiraini, N., Ndunge, A., & Mathuva, D. (2024). Mission drift or simply failure? A cross-country pursuit of why social enterprises run by religious women in the Catholic Church tend to fail. *Social Enterprise Journal*. <https://doi.org/10.1108/SEJ-05-2024-0088>
- Nuer, A. T. K., Rivera-Santos, M., Rufin, C., & Van Dijk, G. (2016). Leaving a social venture: Social entrepreneurial exit among the Maasai in northern Tanzania. *Africa Journal of Management*, 2(3), 281–299. <https://doi.org/10.1080/23322373.2016.1206805>
- Nutt, P. C. (1999). Surprising but true: Half the decisions in organizations fail. *The Academy of Management Executive*, 13(4), 75–90.
- Oberoi, S., Srivastava, S., Gupta, V. K., Joshi, R., & Mehta, A. (2022). Crowd reactions to entrepreneurial failure in rewards-based crowdfunding: A psychological contract theory perspective. *Journal of Risk and Financial Management*, 15(7), 300. <https://doi.org/10.3390/jrfm15070300>
- Olsson, O. (2020). Backer behaviours: An explorative study of investor types in equity crowdfunding. *International Journal of Entrepreneurship and Small Business*, 42(1–2), 156–168. (world). <https://doi.org/10.1504/IJESB.2021.112266>
- O'Neil, I., Ucbasaran, D., & York, J. G. (2022). The evolution of founder identity as an authenticity work process. *Journal of Business Venturing*, 37(1), 106031. <https://doi.org/10.1016/j.jbusvent.2020.106031>
- Oo, P. P., Sahaym, A., Hmieleski, K. M., Chan, R., & Parhankangas, A. (2025). The aha moment! The effects of serendipity and innovation on crowdfunding performance. *Entrepreneurship Theory and Practice*, 49(1), 60–88. <https://doi.org/10.1177/10422587241254069>

- Pache, A.-C., & Santos, F. (2013). Inside the hybrid organization: Selective coupling as a response to competing institutional logics. *Academy of Management Journal*, 56(4), 972–1001. <https://doi.org/10.5465/amj.2011.0405>
- Page, M. J., McKenzie, J. E., Bossuyt, P. M., Boutron, I., Hoffmann, T. C., Mulrow, C. D., Shamseer, L., Tetzlaff, J. M., Akl, E. A., Brennan, S. E., Chou, R., Glanville, J., Grimshaw, J. M., Hróbjartsson, A., Lalu, M. M., Li, T., Loder, E. W., Mayo-Wilson, E., McDonald, S., ... Moher, D. (2021). The PRISMA 2020 statement: An updated guideline for reporting systematic reviews. *BMJ*, 372, n71. <https://doi.org/10.1136/bmj.n71>
- Pan, N. D., Gruber, M., & Binder, J. (2019). Painting with all the colors: The value of social identity theory for understanding social entrepreneurship. *The Academy of Management Review*, 44(1), 213–215. <https://doi.org/10.5465/amr.2017.0504>
- Parhankangas, A., & Renko, M. (2017). Linguistic style and crowdfunding success among social and commercial entrepreneurs. *Journal of Business Venturing*, 32(2), 215–236. <https://doi.org/10.1016/j.jbusvent.2016.11.001>
- Patzelt, H., & Shepherd, D. A. (2024). A fatigue model of social venturing. *Small Business Economics*, 63, 1065–1088. <https://doi.org/10.1007/s11187-023-00853-4>
- Penz, R. F., Hörisch, J., & Tenner, I. (2022). Investors in environmental ventures want good money—and a clean conscience: How framing, interest rates, and the environmental impact of crowdlending projects influence funding decisions. *Technological Forecasting and Social Change*, 182, 121849. <https://doi.org/10.1016/j.techfore.2022.121849>
- Piening, E. P., Thies, F., Wessel, M., & Benlian, A. (2021). Searching for success—Entrepreneurs’ responses to crowdfunding failure. *Entrepreneurship Theory and Practice*, 45(3), 626–657. <https://doi.org/10.1177/1042258720980710>
- Pistilli, L., Paccagnini, A., Breschi, S., & Malerba, F. (2022). Gender bias in entrepreneurship: What is the role of the founders’ entrepreneurial background? *Journal of Business Ethics*, 187(2), 325–346. <https://doi.org/10.1007/s10551-022-05275-y>
- Plehn-Dujowich, J. (2010). A theory of serial entrepreneurship. *Small Business Economics*, 35(4), 377–398. <https://doi.org/10.1007/s11187-008-9171-5>

- Podsakoff, P. M., MacKenzie, S. B., & Podsakoff, N. P. (2012). Sources of method bias in social science research and recommendations on how to control it. *Annual Review of Psychology*, 63(1), 539–569. <https://doi.org/10.1146/annurev-psych-120710-100452>
- Podsakoff, P. M., & Podsakoff, N. P. (2019). Experimental designs in management and leadership research: Strengths, limitations, and recommendations for improving publishability. *The Leadership Quarterly*, 30(1), 11–33. <https://doi.org/10.1016/j.leaqua.2018.11.002>
- Pollack, J. M., Barr, S., & Hanson, S. (2017). New venture creation as establishing stakeholder relationships: A trust-based perspective. *Journal of Business Venturing Insights*, 7, 15–20. <https://doi.org/10.1016/j.jbvi.2016.12.003>
- Pronin, E., Gilovich, T., & Ross, L. (2004). Objectivity in the eye of the beholder: Divergent perceptions of bias in self versus others. *Psychological Review*, 111(3), 781–799. <https://doi.org/10.1037/0033-295X.111.3.781>
- Raith, M. G., & Starke, C. (2017). Negotiating the organizational effectiveness of social ventures among multiple stakeholders. *International Journal of Voluntary and Nonprofit Organizations*, 28(4), 1473–1499. <https://doi.org/10.1007/s11266-016-9716-1>
- Rakowska, J., & Rupert, P. (2024). Determinants of female entrepreneurship in Poland. *Acta Scientiarum Polonorum Oeconomia*, 22(2), 65–72. <https://doi.org/10.22630/ASPE.2023.22.2.12>
- Rawhouser, H., Cummings, M., & Newbert, S. L. (2019). Social impact measurement: Current approaches and future directions for social entrepreneurship research. *Entrepreneurship Theory & Practice*, 43(1), 82–115. <https://doi.org/10.1177/1042258717727718>
- Rejeb, A., Rejeb, K., Appolloni, A., Treiblmaier, H., & Iranmanesh, M. (2024). Uncovering the themes and trends in crowdfunding research using Latent Dirichlet Allocation. *Management Review Quarterly*. <https://doi.org/10.1007/s11301-024-00427-y>
- Ren, H., Sun, S., Zhong, Z., & Wang, S. (2025). Why do females display lower financial risk propensity than males? Evidence from structural MRI and resting-state fMRI. *Journal of Behavioral and Experimental Finance*, 47, 101079. <https://doi.org/10.1016/j.jbef.2025.101079>
- Renko, M. (2013). Early challenges of nascent social entrepreneurs. *Entrepreneurship Theory and Practice*, 37(5), 1045–1069. <https://doi.org/10.1111/j.1540-6520.2012.00522.x>

- Ribeiro-Navarrete, S., Palacios-Marqués, D., Martín Martín, J. M., & Guaita Martínez, J. M. (2021). A synthetic indicator of market leaders in the crowdlending sector. *International Journal of Entrepreneurial Behavior & Research*, 27(6), 1629–1645. <https://doi.org/10.1108/IJEBr-05-2021-0348>
- Rieger, V., Wilken, J., & Engelen, A. (2023). Career booster or dead end? Entrepreneurial failure and its consequences for subsequent corporate careers. *Journal of Management Studies*, 60(4), 800–833. <https://doi.org/10.1111/joms.12866>
- Roccapriore, A. Y., Imhof, Z., & Cardon, M. S. (2021). Badge of honor or tolerable reality? How previous firm failure and experience influences investor perceptions. *Journal of Business Venturing Insights*, 16, e00252. <https://doi.org/10.1016/j.jbvi.2021.e00252>
- Rodríguez-Garnica, G., Gutiérrez-Urtiaga, M., & Tribo, J. A. (2024). Signaling and herding in reward-based crowdfunding. *Small Business Economics*, 64, 889–916. <https://doi.org/10.1007/s11187-024-00933-z>
- Rollie, S. S., & Duck, S. (2013). Divorce and dissolution of romantic relationships: Stage models and their limitations. In *Handbook of divorce and relationship dissolution* (pp. 223–240). Psychology Press.
- Ross, L. (1977). The intuitive psychologist and his shortcomings: Distortions in the attribution process. In *Advances in experimental social psychology* (Vol. 10, pp. 173–220). Elsevier.
- Rossi, A., Vanacker, T., & Vismara, S. (2023). Unsuccessful equity crowdfunding offerings and the persistence in equity fundraising of family business start-ups. *Entrepreneurship Theory and Practice*, 47(4), 1327–1355. <https://doi.org/10.1177/10422587221121290>
- Roundy, P. (2014). *Doing good by telling stories: Emotion in social entrepreneurship communication* (SSRN Scholarly Paper No. 2629011). Social Science Research Network.
- Rumelhart, D. E. (2017). Schemata: The building blocks of cognition. In *Theoretical Issues in Reading Comprehension*. Routledge.
- Ryckman, D. B., & Peckham, P. (1987). Gender differences in attributions for success and failure situations across subject areas. *The Journal of Educational Research*, 81(2), 120–125. <https://doi.org/10.1080/00220671.1987.10885808>

- Saebi, T., Foss, N. J., & Linder, S. (2019). Social entrepreneurship research: Past achievements and future promises. *Journal of Management*, 45(1), 70–95. <https://doi.org/10.1177/0149206318793196>
- Santos, F. M. (2012). A positive theory of social entrepreneurship. *Journal of Business Ethics*, 111(3), 335–351. <https://doi.org/10.1007/s10551-012-1413-4>
- Sarasvathy, S., Professor, A., & Menon, A. (2010). Failing firms and successful entrepreneurs: Serial entrepreneurship as a temporal portfolio. *Small Business Economics*, 40, 417–434. <https://doi.org/10.1007/s11187-011-9412-x>
- Schätzlein, L., Schlütter, D., & Hahn, R. (2023). Managing the external financing constraints of social enterprises: A systematic review of a diversified research landscape. *International Journal of Management Reviews*, 25(1), 176–199. <https://doi.org/10.1111/ijmr.12310>
- Schaubroeck, J., & Williams, S. (1993). Behavioral causality orientations and investment decisions following negative feedback. *Journal of Applied Social Psychology*, 23(16), 1303–1320. <https://doi.org/10.1111/j.1559-1816.1993.tb01034.x>
- Schmuckler, M. A. (2001). What is ecological validity? A dimensional analysis. *Infancy*, 2(4), 419–436. [https://doi.org/10.1207/S15327078IN0204\\_02](https://doi.org/10.1207/S15327078IN0204_02)
- Schüler, J., Anderson, B. S., Y. Murnieks, C., Baum, M., & Küssbauer, A. (2024). Test-retest reliability in metric conjoint experiments: A new workflow to evaluate confidence in model results. *Entrepreneurship Theory and Practice*, 48(2), 742–757. <https://doi.org/10.1177/10422587231184071>
- Schüler, J., Franzke, S., Boehnlein, P., & Baum, M. (2023). Do job crafting opportunities help to win talent? Disentangling and contextualizing the effects of job crafting opportunities on applicant attraction. *Journal of Organizational Behavior*, 44(5), 776–801. <https://doi.org/10.1002/job.2704>
- Schwartz, S. H. (1992). Universals in the content and structure of values: Theoretical advances and empirical tests in 20 countries. In *Advances in experimental social psychology*, Vol. 25 (pp. 1–65). Academic Press. [https://doi.org/10.1016/S0065-2601\(08\)60281-6](https://doi.org/10.1016/S0065-2601(08)60281-6)
- Schwartz, S. H. (1994). Are there universal aspects in the structure and contents of human values? *Journal of Social Issues*, 50(4), 19–45. <https://doi.org/10.1111/j.1540-4560.1994.tb01196.x>

- Schwartz, S. H. (2003). A proposal for measuring value orientations across nations. In *Questionnaire Development Package of the European Social Survey*, 259–319.
- Schwarzer, R., & Weiner, B. (1991). Stigma controllability and coping as predictors of emotions and social support. *Journal of Social and Personal Relationships*, 8(1), 133–140. <https://doi.org/10.1177/0265407591081007>
- Scott, D., & Teasdale, S. (2012). Whose failure? Learning from the financial collapse of a social enterprise in “Steeltown.” *Voluntary Sector Review*, 3, 139–155. <https://doi.org/10.1332/204080512X649333>
- Seanor, P., & Meaton, J. (2008). Learning from failure, ambiguity and trust in social enterprise. *Social Enterprise Journal*, 4(1), 24–40. <https://doi.org/10.1108/17508610810877713>
- Sewaid, A., Silaghi, F., & García-Cestona, M. (2025). Learning from failure: Do narcissists learn? *Small Business Economics*, 64(1), 37–58. <https://doi.org/10.1007/s11187-024-00891-6>
- Shadish, W. R., Cook, T. D., & Campbell, D. T. (2003). Experimental and quasi-experimental designs for generalized causal inference. *Journal of Policy Analysis and Management*, 22(2), 330–332. <https://doi.org/10.1002/pam.10129>
- Shafi, K. (2019). Investors’ evaluation criteria in equity crowdfunding. *Small Business Economics*, 56(1), 3–37. <https://doi.org/10.1007/s11187-019-00227-9>
- Shahid, S. (2023). Perceived barriers and entrepreneurial exit intentions: Moderating role of regular versus sustainable entrepreneurship. *European Business Review*, 35(1), 39–56. <https://doi.org/10.1108/EBR-03-2022-0053>
- Shefrin, H., & Statman, M. (1985). The disposition to sell winners too early and ride losers too long: Theory and evidence. *The Journal of Finance*, 40(3), 777–790. <https://doi.org/10.2307/2327802>
- Shepherd, D. A. (2003). Learning from business failure: Propositions of grief recovery for the self-employed. *Academy of Management Review*, 28(2), 318. <https://doi.org/10.2307/30040715>
- Shepherd, D. A., & Patzelt, H. (2011). The new field of sustainable entrepreneurship: Studying entrepreneurial action linking “what is to be sustained” with “what is to be developed.” *Entrepreneurship Theory and Practice*, 35(1), 137–163. <https://doi.org/10.1111/j.1540-6520.2010.00426.x>



- Shepherd, D. A., & Patzelt, H. (2015). Harsh evaluations of entrepreneurs who fail: The role of sexual orientation, use of environmentally friendly technologies, and observers' perspective taking. *Journal of Management Studies*, 52(2), 253–284.  
<https://doi.org/10.1111/joms.12103>
- Shepherd, D. A., Seyb, S., & Williams, T. (2023). Empathy-driven entrepreneurial action: Well-being outcomes for entrepreneurs and target beneficiaries. *Journal of Business Venturing*, 38. <https://doi.org/10.1016/j.jbusvent.2023.106290>
- Shepherd, D. A., Williams, T., Wolfe, M., & Patzelt, H. (2016). *Learning from entrepreneurial failure: Emotions, cognitions, and actions*. Cambridge University Press.
- Shepherd, D. A., & Zacharakis, A. (2018). Conjoint analysis: A window of opportunity for entrepreneurship research. In J. A. Katz & A. C. Corbett (Eds.), *Reflections and Extensions on Key Papers of the First Twenty-Five Years of Advances* (Vol. 20, pp. 149–183). Emerald Publishing Limited. <https://doi.org/10.1108/S1074-754020180000020011>
- Shneor, R., & Vik, A. A. (2020). Crowdfunding success: A systematic literature review 2010–2017. *Baltic Journal of Management*, 15(2), 149–182. <https://doi.org/10.1108/BJM-04-2019-0148>
- Shneor, R., Wenzlaff, K., Boyko, K., Baah-Preprah, P., & Okhrimenko, O. (2024). *European Crowdfunding Market Report 2023 | crowdfunding.de* (pp. 1–132).  
<https://www.crowdfunding.de/literatur/european-crowdfunding-market-report-2023/>
- Siddaway, A. P., Wood, A. M., & Hedges, L. V. (2019). How to do a systematic review: A best practice guide for conducting and reporting narrative reviews, meta-analyses, and meta-syntheses. *Annual Review of Psychology*, 70, 747–770.  
<https://doi.org/10.1146/annurev-psych-010418-102803>
- Siebeneicher, S., & Bock, C. (2022). Sustainable aim and personal gain? How sustainable value affects the relation between personal value and crowdfunding success. *Technological Forecasting and Social Change*, 183, 121938.  
<https://doi.org/10.1016/j.techfore.2022.121938>
- Siebold, N., Günzel-Jensen, F., & Müller, S. (2019). Balancing dual missions for social venture growth: A comparative case study. *Entrepreneurship & Regional Development*, 31(9–10), 710–734. <https://doi.org/10.1080/08985626.2018.1554710>

- Simons, D. J., Shoda, Y., & Lindsay, D. S. (2017). Constraints on generality (COG): A proposed addition to all empirical papers. *Perspectives on Psychological Science*, 12(6), 1123–1128. <https://doi.org/10.1177/1745691617708630>
- Singaram, R., Kraaijenbrink, J., & Gartner, W. B. (2024). No simple way to say goodbye! Untangling the heterogeneity of social venture founder exit intention. *Entrepreneurship Theory and Practice*, 48(2), 613–644. <https://doi.org/10.1177/10422587231190712>
- Siwale, J., Kimmitt, J., & Amankwah-Amoah, J. (2021). The failure of hybrid organizations: A legitimization perspective. *Management and Organization Review*, 17(3), 452–485. <https://doi.org/10.1017/mor.2020.70>
- Slimane, F., & Rousseau, A. (2020). Crowdlending campaigns for renewable energy: Success factors. *Journal of Cleaner Production*, 249, 119330. <https://doi.org/10.1016/j.jclepro.2019.119330>
- Smith, W., Gonin, M., & Besharov, M. (2013). Managing social-business tensions: A review and research agenda for social enterprise. *Business Ethics Quarterly*, 23, 407–442. <https://doi.org/10.5465/AMBPP.2013.187>
- Smollan, R., & Singh, S. (2021). How social entrepreneurs respond to enterprise failure. *Journal of Social Entrepreneurship*, 1–25. <https://doi.org/10.1080/19420676.2021.1890189>
- Snellman, K., & Solal, I. (2023). Does investor gender matter for the success of female entrepreneurs? Gender homophily and the stigma of incompetence in entrepreneurial finance. *Organization Science*, 34(2), 680–699. <https://doi.org/10.1287/orsc.2022.1594>
- Snow, D. A., Rochford, E. B., Worden, S. K., & Benford, R. D. (1986). Frame alignment processes, micromobilization, and movement participation. *American Sociological Review*, 51(4), 464–481. <https://doi.org/10.2307/2095581>
- Souakri, A., Coeurderoy, R., & Zacharakis, A. (2023). Valuing failure: An experiment of VC reactions to an entrepreneur's record of business creation. *Journal of Small Business Management*, 61(5), 2350–2381. <https://doi.org/10.1080/00472778.2022.2056608>
- Spence, M. (1973). Job market signaling. *The Quarterly Journal of Economics*, 87(3), 355. <https://doi.org/10.2307/1882010>

- Spence, M. (2002). Signaling in retrospect and the informational structure of markets. *American Economic Review*, 92(3), 434–459.  
<https://doi.org/10.1257/00028280260136200>
- Statista. (2024). *CrowdLending (Business)—Worldwide | Market Forecast*. Statista.  
[https://www.statista.com/outlook/fmo/capital-raising/digital-capital-raising/crowdlending-business/worldwide?srsId=AfmBOoqLOcOU8Aw9RnllOAS4y\\_q5oo7UnZI\\_Q9DNJOeTbBM1sDuJmGCy](https://www.statista.com/outlook/fmo/capital-raising/digital-capital-raising/crowdlending-business/worldwide?srsId=AfmBOoqLOcOU8Aw9RnllOAS4y_q5oo7UnZI_Q9DNJOeTbBM1sDuJmGCy)
- Steigenberger, N., & Wilhelm, H. (2018). Extending signaling theory to rhetorical signals: Evidence from crowdfunding. *Organization Science*, 29(3), 529–546.  
<https://doi.org/10.1287/orsc.2017.1195>
- Stevens, R., Moray, N., & Bruneel, J. (2015). The social and economic mission of social enterprises: Dimensions, measurement, validation, and relation. *Entrepreneurship Theory and Practice*, 39(5), 1051–1082. <https://doi.org/10.1111/etap.12091>
- Stevenson, R., Allen, J., & Wang, T. (2022). Failed but validated? The effect of market validation on persistence and performance after a crowdfunding failure. *Journal of Business Venturing*, 37(2). <https://doi.org/10.1016/j.jbusvent.2021.106175>
- Sundermeier, J. (2024). ‘It just seems that they don’t act like men’: The influence of gender role stereotypes on women’s entrepreneurial innovation activities. *Journal of Business Research*, 185, 114902. <https://doi.org/10.1016/j.jbusres.2024.114902>
- Swim, J. K., & Sanna, L. J. (1996). He’s skilled, she’s lucky: A meta-analysis of observers’ attributions for women’s and men’s successes and failures. *Personality and Social Psychology Bulletin*, 22(5), 507–519. <https://doi.org/10.1177/0146167296225008>
- Taj, S. A. (2016). Application of signaling theory in management research: Addressing major gaps in theory. *European Management Journal*, 34(4), 338–348.  
<https://doi.org/10.1016/j.emj.2016.02.001>
- Taylor, B. J. (2006). Factorial surveys: Using vignettes to study professional judgement. *The British Journal of Social Work*, 36(7), 1187–1207.  
<https://doi.org/10.1093/bjsw/bch345>
- Taylor, S. E., & Brown, J. D. (1988). Illusion and well-being: A social psychological perspective on mental health. *Psychological Bulletin*, 103(2), 193–210.  
<https://doi.org/10.1037/0033-2909.103.2.193>

- Tenner, I., & Hörisch, J. (2021). Crowdfunding sustainable entrepreneurship: What are the characteristics of crowdfunding investors? *Journal of Cleaner Production*, 290, 125667. <https://doi.org/10.1016/j.jclepro.2020.125667>
- Thaler, M. (2021). Gender differences in motivated reasoning. *Journal of Economic Behavior & Organization*, 191(C), 501–518. <https://doi.org/10.1016/j.jebo.2021.09.016>
- Thaler, R. H. (1999). Mental accounting matters. *Journal of Behavioral Decision Making*, 12(3), 183–206.
- Theunissen, P., & Millone, M. (2024). Gender effects in crowdfunded business loan campaigns. *PLOS ONE*, 19(7), e0305601. <https://doi.org/10.1371/journal.pone.0305601>
- Thoits, P. A. (1995). Stress, coping, and social support processes: Where are we? What next? *Journal of Health and Social Behavior*, 35, 53. <https://doi.org/10.2307/2626957>
- Thorndike, E. L. (1920). A constant error in psychological ratings. *Journal of Applied Psychology*, 4(1), 25–29. <https://doi.org/10.1037/h0071663>
- Tomlinson, E. C. (2020). Stasis in the shark tank: Persuading an audience of funders to act on behalf of entrepreneurs. *Journal of Business and Technical Communication*, 34(3), 221–249. <https://doi.org/10.1177/1050651920910219>
- Trautwein, C. (2021). Sustainability impact assessment of start-ups – Key insights on relevant assessment challenges and approaches based on an inclusive, systematic literature review. *Journal of Cleaner Production*, 281, 125330. <https://doi.org/10.1016/j.jclepro.2020.125330>
- Tsiros, M., Mittal, V., & Ross Jr., W. T. (2004). The role of attributions in customer satisfaction: A reexamination. *Journal of Consumer Research*, 31(2), 476–483. <https://doi.org/10.1086/422124>
- Tversky, A., & Kahneman, D. (1974). Judgment under uncertainty: Heuristics and biases. *Science (New York, N.Y.)*, 185(4157), 1124–1131. <https://doi.org/10.1126/science.185.4157.1124>
- Ucbasaran, D., Shepherd, D. A., Lockett, A., & Lyon, S. J. (2013). Life after business failure: The process and consequences of business failure for entrepreneurs. *Journal of Management*, 39(1), 163–202. <https://doi.org/10.1177/0149206312457823>
- Uebbing, L., Wehner, M. C., Aránega, A. Y., & Guaita Martínez, J. M. (2025). Make it or leave it?– An exploration of post-foundation dynamics among female entrepreneurs.

- International Entrepreneurship and Management Journal*, 21(1), 52.  
<https://doi.org/10.1007/s11365-024-01065-2>
- Urbano, D., Ferri, E., Alvarez, C., & Noguera, M. (2017). Social Entrepreneurship and Institutional Conditions: An Empirical Analysis in Spain. In M. Peris-Ortiz, F. Teulon, & D. Bonet-Fernandez (Eds.), *Social Entrepreneurship in Non-Profit and Profit Sectors: Theoretical and Empirical Perspectives* (pp. 53–64). Springer International Publishing. [https://doi.org/10.1007/978-3-319-50850-4\\_4](https://doi.org/10.1007/978-3-319-50850-4_4)
- Vallaster, C., Kraus, S., Merigó Lindahl, J. M., & Nielsen, A. (2019). Ethics and entrepreneurship: A bibliometric study and literature review. *Journal of Business Research*, 99(C), 226–237. <https://doi.org/10.1016/j.jbusres.2019.02.050>
- van Gils, S., & Horton, K. E. (2019). How can ethical brands respond to service failures? Understanding how moral identity motivates compensation preferences through self-consistency and social approval. *Journal of Business Research*, 95, 455–463. <https://doi.org/10.1016/j.jbusres.2018.07.042>
- van Praag, C. M. (2003). Business survival and success of young small business owners. *Small Business Economics*, 21(1), 1–17. <https://doi.org/10.1023/A:1024453200297>
- Vanacker, T., Vismara, S., & Walthoff-Borm, X. (2019). What happens after a successful crowdfunding campaign? In H. Landström, A. Parhankangas, & C. Mason (Eds.), *Handbook of research on crowdfunding* (pp. 227–248). Edward Elgar. <https://doi.org/10.4337/9781788117210.00015>
- VandenBos, G. R. (2007). *APA Dictionary of Psychology* (pp. xvi, 1024). American Psychological Association.
- Venkataramani, V., Bartol, K. M., Zheng, X., Lu, S., & Liu, X. (2022). Not very competent but connected: Leaders' use of employee social networks as prisms to make delegation decisions. *Journal of Applied Psychology*, 107(3), 458–480. <https://doi.org/10.1037/apl0000902>
- Vismara, S., Benaroyo, D., & Carne, F. (2016). *Gender in entrepreneurial finance: Matching investors and entrepreneurs in equity crowdfunding* (SSRN Scholarly Paper No. 2833946). Social Science Research Network. <https://papers.ssrn.com/abstract=2833946>
- Vogele, J., Haski-Leventhal, D., & Lundmark, E. (2023). From nirvana to shiva in impact investing: Value (in)congruence in investor–investee relationships. *Business & Society*, 62(6), 1300–1334. <https://doi.org/10.1177/00076503221145004>

- Voitkane, A., Johansson, J., Malmström, M., & Wincent, J. (2019). How much does the “same-gender effect” matter in VCs’ assessments of entrepreneurs? *Journal of Business Venturing Insights*, 12, e00133. <https://doi.org/10.1016/j.jbvi.2019.e00133>
- Walsh, G. S., & Cunningham, J. A. (2017). Regenerative failure and attribution: Examining the underlying processes affecting entrepreneurial learning. *International Journal of Entrepreneurial Behavior & Research*, 23(4), 688–707. <https://doi.org/10.1108/IJEBR-03-2015-0072>
- Wang, D., & Prokop, J. (2025). Gender homophily and local bias in equity crowdfunding. *Small Business Economics*, 64(3), 805–836. <https://doi.org/10.1007/s11187-024-00949-5>
- Wang, Q., Li, S., Zhang, H., & Luan, Z. (2024). Learning from failure, resource orchestration and social enterprise growth performance: The moderating role of failure normalization. *Current Psychology*, 43(15), 13692–13705. <https://doi.org/10.1007/s12144-023-05346-x>
- Wang, W., Xu, Y., Wu, Y. J., & Goh, M. (2022). Linguistic information distortion on investment decision-making in the crowdfunding market. *Management Decision*, 60(3), 648–672. <https://doi.org/10.1108/MD-09-2020-1203>
- Warnick, B. J., Murnieks, C. Y., McMullen, J. S., & Brooks, W. T. (2018). Passion for entrepreneurship or passion for the product? A conjoint analysis of angel and VC decision-making. *Journal of Business Venturing*, 33(3), 315–332. <https://doi.org/10.1016/j.jbusvent.2018.01.002>
- Wasiuzzaman, S., Chong, L. L., & Ong, H. B. (2021). Influence of perceived risks on the decision to invest in equity crowdfunding: A study of Malaysian investors. *Journal of Entrepreneurship in Emerging Economies*, 14(2), 208–230. <https://doi.org/10.1108/JEEE-11-2020-0431>
- Wehnert, P., Baccarella, C. V., & Beckmann, M. (2019). In crowdfunding we trust? Investigating crowdfunding success as a signal for enhancing trust in sustainable product features. *Technological Forecasting and Social Change*, 141, 128–137. <https://doi.org/10.1016/j.techfore.2018.06.036>
- Wei, S., Boudreaux, C. J., Su, Z., & Wu, Z. (2024). Natural disasters, personal attributes, and social entrepreneurship: An attention-based view. *Small Business Economics*, 62(4), 1409–1427. <https://doi.org/10.1007/s11187-023-00822-x>

- Weick, K. E. (1995). *Sensemaking in organizations* (Vol. 3). Sage publications Thousand Oaks, CA.
- Weiner, B. (1985). An attributional theory of achievement motivation and emotion. *Psychological Review*, 92(4), 548–573. <https://doi.org/10.1037/0033-295X.92.4.548>
- Weiner, B. (2018). The legacy of an attribution approach to motivation and emotion: A no-crisis zone. *Motivation Science*, 4(1), 4. <https://doi.org/10.1037/mot0000082>
- Wheeler, S. C., & Petty, R. E. (2001). The effects of stereotype activation on behavior: A review of possible mechanisms. *Psychological Bulletin*, 127(6), 797–826. <https://doi.org/10.1037/0033-2909.127.6.797>
- White, M. (2002). Addressing personal failure. *International Journal of Narrative Therapy & Community Work*, 2002(3), 33–76.
- White, M., & Epston, D. (1990). *Narrative means to therapeutic ends*. WW Norton & Company.
- Wronka-Pośpiech, M. (2018). Exploring failure among social entrepreneurs – evidence from Poland. *International Journal of Contemporary Management*, 17(1), 269–286. <https://doi.org/10.4467/24498939IJCM.18.015.8394>
- Wronka-Pośpiech, M. (2024). Exploring the mindset of social entrepreneurs towards failure: Evidence from focus group interviews. *Social Entrepreneurship Review*, 2, 56–74. <https://doi.org/10.15678/SER.2024.2.04>
- Wry, T., & York, J. G. (2017). An identity-based approach to social enterprise. *The Academy of Management Review*, 42(3), 437–460. <https://doi.org/10.5465/amr.2013.0506>
- Xu, L., Ou, A. Y., Park, H. D., & Jiang, H. (2024). Breaking barriers or maintaining status quo? Female representation in decision-making group of venture capital firms and the funding of woman-led businesses. *Journal of Business Venturing*, 39(1), 106368. <https://doi.org/10.1016/j.jbusvent.2023.106368>
- Yamakawa, Y., & Cardon, M. S. (2015). Causal ascriptions and perceived learning from entrepreneurial failure. *Small Business Economics*, 44(4), 797–820. <https://doi.org/10.1007/s11187-014-9623-z>
- Yamakawa, Y., Peng, M. W., & Deeds, D. L. (2010). How does experience of previous entrepreneurial failure impact future entrepreneurship? *Academy of Management Proceedings*, 2010(1), 1–5. <https://doi.org/10.5465/ambpp.2010.54494761>

- Yang, T., & del Carmen Triana, M. (2019). Set up to fail: Explaining when women-led businesses are more likely to fail. *Journal of Management*, 45(3), 926–954. <https://doi.org/10.1177/0149206316685856>
- Yitshaki, R., Kropp, F., & Honig, B. (2022). The role of compassion in shaping social entrepreneurs' prosocial opportunity recognition. *Journal of Business Ethics*, 179(2), 617–647. <https://doi.org/10.1007/s10551-021-04860-x>
- York, J. G., O'Neil, I., & Sarasvathy, S. D. (2016). Exploring environmental entrepreneurship: Identity coupling, venture goals, and stakeholder incentives. *Journal of Management Studies*, 53(5), 695–737. <https://doi.org/10.1111/joms.12198>
- Zahra, S. A., Gedajlovic, E., Neubaum, D. O., & Shulman, J. M. (2009). A typology of social entrepreneurs: Motives, search processes and ethical challenges. *Journal of Business Venturing, Special Issue Ethics and Entrepreneurship*, 24(5), 519–532. <https://doi.org/10.1016/j.jbusvent.2008.04.007>
- Zhang, X., Sun, Y., Gao, Y., & Dong, Y. (2022). Paths out of poverty: Social entrepreneurship and sustainable development. *Frontiers in Psychology*, 13. <https://doi.org/10.3389/fpsyg.2022.1062669>
- Ziegler, T., & Shneor, R. (2020). Lending crowdfunding: Principles and market development. In R. Shneor, L. Zhao, & B.-T. Flåten (Eds.), *Advances in crowdfunding: Research and practice* (pp. 63–92). Springer International Publishing. [https://doi.org/10.1007/978-3-030-46309-0\\_4](https://doi.org/10.1007/978-3-030-46309-0_4)
- Zietsma, C., & Tuck, R. (2012). First, do no harm: Evaluating resources for teaching social entrepreneurship. *Academy of Management Learning and Education*, 11, 512–517. <https://doi.org/10.5465/amle.2011.0027>
- Zunino, D., Dushnitsky, G., & Van Praag, M. (2022). How do investors evaluate past entrepreneurial failure? Unpacking failure due to lack of skill versus bad luck. *Academy of Management Journal*, 65(4), 1083–1109. <https://doi.org/10.5465/amj.2018.0579>



**Appendix****Appendix A1 (Essay I) – Hypothetical scenario initial investment**

You have a well-paid job and already invest a fixed percentage of your income in the financial market. You recently read an article about crowdfinancing and now want to invest in projects of young ventures via a crowdfinancing platform. Crowdfinancing allows you, as a private investor, to support young ventures while earning an attractive financial return.

Crowdfinancing aims to aggregate capital via the internet for the implementation of projects by young ventures. Projects are financed by a large number of investors through small loans at fixed interest rates.

On the crowdfinancing platform INVESTIA, you can read the project description of a young venture seeking seed capital. The project presented offers a financial return of 7%. If the project is successful, you will receive a return on your investment, including the return, over the project's duration of two years. If the project is not successful, you may lose all or part of your investment.

**Appendix A2 (Essay I) – Vignette social campaign**

The young venture SOCIALY is building a digital platform to integrate refugees into the German labor market.

Through an app, refugees can access relevant expertise and learning content to start a career in the German labor market. In this way, SOCIALY helps refugees to build a new life for themselves and at the same time helps other companies to benefit from diversity in the labor market. SOCIALY plans to generate revenue from the use of the platform by companies, which will be used to repay the investment.

The integration of refugees into the labor market is a key goal for the young venture and its

activities. SOCIALY plans to provide 6,000 refugees with a career in the German labor market each year.

The project presented offers a return on investment of 7%.

The project is located in an industry with high growth potential and high profit margins.

Assume that the business plan looks good.

### **Appendix A3 (Essay I) – Vignette environmental campaign**

The young venture ECOLY is building a digital platform for the rental of reusable containers for takeaway food from restaurants in Germany.

Through an app, consumers can rent reusable containers from partner restaurants for free and return them to all participating restaurants within 14 days. In this way, ECOLY aims to significantly reduce waste from disposable packaging and thus counteract the waste of resources. Through the use of reusable containers, ECOLY plans to generate revenue from the restaurants, which will be used to repay the investment.

Reducing CO2 emissions is a central goal of the young venture and its activities. ECOLY plans to save approximately 6,000 tons of CO2 emissions per year.

The project presented offers a 7% return on investment.

The project is located in an industry with high growth potential and high profit margins.

Assume that the business plan looks good.

### **Appendix A4 (Essay I) – Vignette commercial campaign**

The young venture FINLY is building a digital platform for providing financial advice to investors in Germany.

Through an app, investors can access expert knowledge and coaching to create a personal financial plan. In this way, FINLY aims to provide modern access to the financial market and

automated investments. FINLY plans to generate revenue from investments made in the app and through partner companies, which it will use to repay the amount invested.

Increasing the company's revenue is a central goal of the young venture and its activities.

FINLY plans to reach approximately 6,000 customers annually.

The project presented offers a 7% return on investment.

The project is located in an industry with high growth potential and high profit margins.

Assume that the business plan looks good.

#### **Appendix A5 (Essay I) – Hypothetical scenario failure signal**

After a while, you receive an email informing you of the status update of the project on the crowdfunder platform. You log in to your investor area and the project description appears again:

Dear Investor,

We would like to inform you that during the implementation of the project of the young venture SOCIALY/ECOLY/FINLY/, unforeseen problems arose, which ultimately led to the failure of the project. Therefore, we regret to inform you that the repayment of the investment has failed. This means that all investors have lost their investment and will not receive any return.

We regret this and remind you that this type of investment carries a risk of total loss. We would be pleased if you would continue to invest via the platform to support the ideas of young ventures.

Yours sincerely

Your Investia Team

**Appendix A6 (Essay I) – Randomization check (Study 1)**

| Variable                    | Campaign      | Experienced crowd investors |           |          |          | Inexperienced crowd investors |           |          |          |
|-----------------------------|---------------|-----------------------------|-----------|----------|----------|-------------------------------|-----------|----------|----------|
|                             |               | <i>M</i>                    | <i>SD</i> | <i>p</i> | <i>N</i> | <i>M</i>                      | <i>SD</i> | <i>p</i> | <i>N</i> |
| Gender                      | Social        | 1.50                        | .53       | .52      | 10       | 1.58                          | .50       | .53      | 40       |
|                             | Environmental | 1.46                        | .52       |          | 13       | 1.45                          | .50       |          | 40       |
|                             | Commercial    | 1.70                        | .48       |          | 10       | 1.53                          | .50       |          | 47       |
| Age                         | Social        | 33.30                       | 11.98     | .18      | 10       | 43.75                         | 13.62     | .49      | 40       |
|                             | Environmental | 41.62                       | 12.97     |          | 13       | 45.90                         | 14.60     |          | 40       |
|                             | Commercial    | 34.90                       | 6.97      |          | 10       | 42.30                         | 14.02     |          | 47       |
| Investment experience years | Social        | 5.20                        | 7.30      | .72      | 10       | 11.35                         | 11.92     | .47      | 40       |
|                             | Environmental | 7.69                        | 8.41      |          | 13       | 12.83                         | 12.52     |          | 40       |
|                             | Commercial    | 6.90                        | 5.86      |          | 10       | 9.85                          | 9.22      |          | 47       |
| Willingness to take risks   | Social        | 4.30                        | 1.80      | .96      | 10       | 3.69                          | 1.24      | .25      | 40       |
|                             | Environmental | 4.46                        | 1.16      |          | 13       | 3.34                          | 1.37      |          | 40       |
|                             | Commercial    | 4.45                        | 1.28      |          | 10       | 3.22                          | 1.36      |          | 47       |
| Social desirability         | Social        | 1.30                        | .26       | .95      | 10       | 1.34                          | .26       | .39      | 40       |
|                             | Environmental | 1.31                        | .27       |          | 13       | 1.41                          | .24       |          | 40       |
|                             | Commercial    | 1.27                        | .22       |          | 10       | 1.34                          | .24       |          | 47       |

*Note.* *N* = 160, Experienced crowd investor *N* = 33, Inexperienced crowd investor *N* = 127, *M* = Mean, *SD* = Standard deviation, *p* = *p*-value.

**Appendix A7 (Essay I) – Vignette social campaign (Study 2)***Creating Jobs and Combating Poverty with Briquettes from Waste Recycling*

Dear Investor,

Nairobi, like many other large cities, has a waste problem. The city produces approximately 800,000 tons of solid waste annually, of which only 50% is collected. The Kenyan company Sana pursues the strategy of creating jobs through waste recycling. The company collects 60 tons of organic waste daily and provides employment for local workers. The collected materials are converted into valuable new products, such as animal feed and organic fertilizer.

The forward-looking company now wants to finance a briquetting plant and process the collected biomass into biomass briquettes for energy production in an additional step.

Through the implementation of this project, not only will around 100 new jobs be created, which can help combat poverty, but also the waste heat generated during the production of the briquettes will be used sensibly in the production of insect-based animal feed.

By participating in these early projects, you support a social concept in Kenya and receive a return of 7% over a period of 4 years in return. The acquisition of this investment is associated with significant risks and may result in the complete loss of the invested assets.

Investment Details:

- UN Development Goals
- Estimated number of jobs created: 100
- Duration: 4 years

1 No Poverty; 2 Zero Hunger; 12 Responsible Consumption and Production; 13 Climate Action; 15 Life on Land

**Appendix A8 (Essay I) – Vignette environmental campaign (Study 2)***Supporting the Circular Economy in Kenya with Briquettes from Organic Waste*

Dear Investor,

Nairobi, like many other large cities, has a waste problem. The city produces approximately 800,000 tons of solid waste annually, of which only 50% is collected. The Kenyan company Sana aims for a zero-waste circular economy in Kenya and contributes every day to waste elimination, which would otherwise be disposed of illegally and untreated in nature. The company collects 60 tons of organic waste daily and converts it into new valuable products, such as animal feed and organic fertilizer.

The forward-looking company now wants to finance a briquetting plant and process the collected biomass into biomass briquettes for energy production in an additional step. In this way, a sustainable energy carrier is created, which serves as a substitute for fossil fuels such as coal, oil, and petroleum. Through the implementation of the project, approximately 6,000 tons of CO<sub>2</sub> are saved annually.

By participating in these early projects, you support a sustainable concept in Kenya and receive a return of 7% over a period of 4 years in return. The acquisition of this investment is associated with significant risks and may result in the complete loss of the invested assets.

Investment Details:

- 5 UN Development Goals
- 6,354 tons of CO<sub>2</sub> savings
- Duration: 4 years

6 Clean Water and Sanitation; 7 Affordable and Clean Energy; 12 Responsible Consumption and Production; 13 Climate Action; 15 Life on Land

**Appendix A9 (Essay I) – Vignette commercial campaign (Study 2)***Producing Affordable Energy with Briquettes from Waste Recycling*

Dear Investor,

Nairobi, like many other large cities, has a waste problem. The city produces approximately 800,000 tons of solid waste annually, of which only 50% is collected. The Kenyan company Sana pursues the strategy of producing new products from waste. The company collects 60 tons of organic waste daily at a low cost and converts it into valuable new products, such as animal feed and organic fertilizer.

The forward-looking company now wants to finance a briquetting plant and process the collected biomass into biomass briquettes for energy production in an additional step. In this way, an affordable energy carrier is created, which serves as a substitute for energy from coal, oil, and petroleum.

By participating in these early projects, you support the company in processing the collected waste more efficiently and thereby producing energy at a lower cost. In return for your support, a return of 7% over a period of 4 years is offered. Investors who invest in the project within the first two weeks will additionally receive an early-bird bonus of 1%.

The acquisition of this investment is associated with significant risks and may result in the complete loss of the invested assets.

**Investment Details and Economic Benefits:**

- Expected return: 7% over 4 years
- +1% preliminary interest
- +1% early-bird bonus
- Duration: 4 years



7% Return



+1% Early-Bird



+1% Preliminary  
Interest



4 Years Duration

**Appendix A10 (Essay I) – Randomization check (Study 2)**

| Variable                    | Campaign      | Experienced crowd investors |           |          |          | Inexperienced crowd investors |           |          |          |
|-----------------------------|---------------|-----------------------------|-----------|----------|----------|-------------------------------|-----------|----------|----------|
|                             |               | <i>M</i>                    | <i>SD</i> | <i>p</i> | <i>N</i> | <i>M</i>                      | <i>SD</i> | <i>p</i> | <i>N</i> |
| Gender                      | Social        | 1.70                        | .46       | .40      | 37       | 1.69                          | .47       | .98      | 67       |
|                             | Environmental | 1.78                        | .42       |          | 41       | 1.68                          | .47       |          | 62       |
|                             | Commercial    | 1.63                        | .49       |          | 30       | 1.69                          | .47       |          | 71       |
| Age                         | Social        | 35.24                       | 6.38      | .68      | 37       | 35.39                         | 10.10     | .38      | 67       |
|                             | Environmental | 35.61                       | 7.63      |          | 41       | 33.29                         | 7.63      |          | 62       |
|                             | Commercial    | 34.07                       | 8.65      |          | 30       | 35.17                         | 10.07     |          | 71       |
| Investment experience years | Social        | 5.97                        | 4.79      | .65      | 37       | 5.90                          | 5.51      | .67      | 67       |
|                             | Environmental | 7.17                        | 6.64      |          | 41       | 5.23                          | 5.68      |          | 62       |
|                             | Commercial    | 6.17                        | 6.64      |          | 30       | 6.07                          | 5.83      |          | 71       |
| Willingness to take risks   | Social        | 4.12                        | 1.21      | .62      | 37       | 4.05                          | 1.19      | .83      | 67       |
|                             | Environmental | 4.33                        | 1.24      |          | 41       | 4.14                          | 1.23      |          | 62       |
|                             | Commercial    | 4.38                        | 1.07      |          | 30       | 4.01                          | 1.31      |          | 71       |
| Social desirability         | Social        | 1.52                        | .32       | .35      | 37       | 1.49                          | .26       | .41      | 67       |
|                             | Environmental | 1.43                        | .31       |          | 41       | 1.42                          | .30       |          | 62       |
|                             | Commercial    | 1.42                        | .33       |          | 30       | 1.46                          | .28       |          | 71       |

*Note.* *N* = 308, Experienced crowd investor *n* = 108, Inexperienced crowd investor *n* = 200,

*M* = Mean, *SD* = Standard deviation, *p* = *p*-value.



**Appendix A11 (Essay I) – Study variables (Studies 1 and 2)**

| Variables                                             | Item                                                                                                                                 | Scale                        | Source                                          |
|-------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|------------------------------|-------------------------------------------------|
| <i>Initial investment allocation</i>                  | How much of your €1,000/€3,000 would you like to invest in the start-up presented before through crowdlending?                       | Slider                       | e.g., Kanze et al., (2018); Shneor & Vik (2020) |
| <i>Subsequent investment after investment failure</i> | How much of your €1,000/€3,000 would you like to invest in start-ups like the one presented before through crowdlending?             | Slider                       | e.g., Kanze et al., (2018); Shneor & Vik (2020) |
| <i>Crowdfunding experience</i>                        | Have you ever invested in campaigns via crowdfunding?                                                                                | Yes/No                       |                                                 |
| <i>Age</i>                                            | What is your age in years?                                                                                                           | Open text                    | e.g., Tenner & Hörisch (2021)                   |
| <i>Gender</i>                                         | Which gender do you feel you belong to?                                                                                              | Female, male, diverse, other |                                                 |
| <i>Investment experience years</i>                    | Approximately how many years of investment experience do you have?                                                                   | Open text                    | e.g., Dinh & Wehner (2022); Penz et al., (2022) |
| <i>Social desirability</i>                            | Would you smile at people every time you meet them?                                                                                  | Yes/No                       | Haghighat (2007)                                |
|                                                       | Do you always practice what you preach to people?                                                                                    |                              |                                                 |
|                                                       | If you say to people that you will do something, do you always keep your promise no matter how inconvenient it might be?             |                              |                                                 |
|                                                       | Would you ever lie to people?                                                                                                        |                              |                                                 |
| <i>Willingness to take risks</i>                      | Are you generally a person who is fully prepared to take risks or do you try to avoid taking risk?                                   | Likert scale 1-7             | Menkhoff & Sakha (2016)                         |
|                                                       | When thinking about investing and borrowing, are you a person who is fully prepared to take risk or do you try to avoid taking risk? |                              |                                                 |

**Appendix B1 (Essay II) – Scripted audio pitch social venture framing (Study 1)**

Hello! I am the founder of Socialy. I am pleased to present our social startup and product to you today.

Our social startup is developing a digital platform to integrate refugees into the German labor market. Through our app, refugees can access relevant expertise and learning content to start a career in the German labor market.

Our app offers refugees the opportunity to build a new life while helping companies benefit from cultural and professional diversity in the labor market. We plan to generate revenue from companies using our platform, which will be used to repay the investment amount.

Our main goal is to fulfill our social mission and help approximately 6,000 refugees integrate into the German labor market annually, thus offering them a new perspective.

As a founder, I am convinced that every individual can make a difference, and that is exactly why we need your support. With your financial help, we can develop our app further. Every contribution helps us to drive our social mission.

**Appendix B2 (Essay II) – Scripted audio pitch commercial venture framing (Study 1)**

Hello! I am the founder of Finly. I am pleased to present our startup and our product to you today.

Our startup is developing a digital platform for financial advice for investors in Germany.

Through our app, investors can access expert knowledge and coaching to create a personal financial plan.

Our app provides investors and savers in Germany with modern access to the financial market and enables automated investments using the latest technology. We plan to generate revenue through investments made in the app and through partner companies, which will be used to repay the investment amount.

Our main goal is to grow and increase our company's revenues by gaining about 6,000 new customers each year and offering them excellent investment opportunities.

As a founder, I am convinced that every individual can make a difference, and that is exactly why we need your support. With your financial help, we can develop our app further. Every contribution helps us drive our growth.

### **Appendix B3 (Essay II) – Failure E-mail (Study 1)**

*Subject: Investment Loss*

Dear Investor,

It is with regret that I must inform you, as the founder of Finly/Socialy, that our startup has encountered unexpected obstacles in implementing our project, which has ultimately led to its failure. Unfortunately, this means that it is not possible to repay your investment. This means that you and all other investors have lost the amount invested and will not receive any return.

We understand this is disappointing news for you, and we sincerely thank you for your trust and support. With this type of investment, there is always the risk of a total loss, and we deeply

regret that this has happened in our case.

Although our project has failed, we hope you will continue supporting startups like ours on their journey. Your commitment and investments are valuable in promoting innovation and entrepreneurship.

With kind regards,

Founder of Finly/Socialy

**Appendix B4 (Essay II) – Control variables (Study 1)**

| <b>Control variable</b> | <b>Item</b>                                                                                                                                                                                                                                                                                                                    | <b>Scale</b>                                                                  | <b>Source</b>                 |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|-------------------------------|
| Age                     | What is your age in years?                                                                                                                                                                                                                                                                                                     | Open question                                                                 | e.g., Tenner & Hörisch (2021) |
| Gender crowd lender     | Which gender do you feel you belong to?                                                                                                                                                                                                                                                                                        | Female, male, diverse, other                                                  |                               |
| Income                  | What is your household income per month?                                                                                                                                                                                                                                                                                       | < €1,000<br>€1,001 - €2,000<br>€2,001 - €3,000<br>€3,001 - €4,000<br>> €4,000 |                               |
| Crowdfunding experience | Have you ever invested in campaigns via crowdfunding?                                                                                                                                                                                                                                                                          | Yes/No                                                                        | Penz et al. (2022)            |
| Social desirability     | Would you smile at people every time you meet them?<br><br>Do you always practice what you preach to people?<br><br>If you say to people that you will do something, do you always keep your promise no matter how inconvenient it might be?<br><br>Would you ever lie to people?                                              | Yes/No                                                                        | Haghighat (2007)              |
| Manipulation check      | For participants who have heard the social venture framing: “It is a for-profit organization that generates revenue to achieve the social mission”<br><br>For participants who have heard the commercial venture framing: “It is a for-profit organization that generates revenue without pursuing specific social objectives” |                                                                               | (Lindlar et al., 2025)        |

**Appendix B5 (Essay II) – Balance check sample (Study 1)**

| Variable                  | Audio pitches    | <i>M</i> | <i>SD</i> | <i>N</i> | <i>p</i> |
|---------------------------|------------------|----------|-----------|----------|----------|
| Age                       | Woman social     | 31.77    | 9.43      | 43       | .97      |
|                           | Man social       | 31.43    | 10.44     | 47       |          |
|                           | Woman commercial | 31.17    | 6.99      | 42       |          |
|                           | Man commercial   | 30.90    | 8.30      | 40       |          |
| Investment experience     | Woman social     | 4.08     | 4.69      | 43       | .56      |
|                           | Man social       | 5.38     | 6.08      | 47       |          |
|                           | Woman commercial | 4.31     | 4.20      | 42       |          |
|                           | Man commercial   | 4.17     | 4.19      | 40       |          |
| Gender crowd lender       | Woman social     | 1.56     | .50       | 43       | .61      |
|                           | Man social       | 1.57     | .50       | 47       |          |
|                           | Woman commercial | 1.48     | .50       | 42       |          |
|                           | Man commercial   | 1.63     | .54       | 40       |          |
| Willingness to take risks | Woman social     | 3.22     | .93       | 43       | .63      |
|                           | Man social       | 3.21     | .86       | 47       |          |
|                           | Woman commercial | 3.09     | .96       | 42       |          |
|                           | Man commercial   | 3.00     | .85       | 40       |          |
| Social desirability       | Woman social     | 3.34     | .64       | 43       | .77      |
|                           | Man social       | 3.45     | .63       | 47       |          |
|                           | Woman commercial | 3.34     | .65       | 42       |          |
|                           | Man commercial   | 3.35     | .51       | 40       |          |

**Appendix B6 (Essay II) – Instruction and practice example conjoint study (Study 2)**

In this study, we will describe various hypothetical startups. We invite you to imagine yourself as an investor evaluating each of these startup founders for a potential investment on a crowdlending/investing platform. Crowdlending allows private investors to support young companies while receiving an attractive return financially.

Assume that you have recently saved €10,000 and are keen to invest this money. After each scenario, we will ask for your investment decision. Each crowdlending investment opportunity presented belongs to an industry with high growth potential and substantial profit margins. Always assume that the company's business plan is promising. It is scalable, and the competitive position seems sustainable. The project duration encompasses two years, and you receive a return of 7% if the project is successful.

The following criteria are available for making an investment decision:

*Criteria 1: Venture mission*

Social mission: It is a social startup. A social mission characterizes this social startup, as it generates revenue to achieve social objectives (e.g., an app that assists in integrating refugees into the labor market).

Commercial mission: It is a profit-oriented startup. This startup's commercial mission characterizes it, as it generates revenue to achieve growth without pursuing specific social objectives (e.g., an app that assists investors in financial advising/planning).

*Criteria 2: Entrepreneurial experience*

Previous failure: The startup's founder has previously failed with his/her startup.

No previous experience: The startup's founder has no prior founding experience.

Previous success: The startup's founder has been successful with an earlier startup.

*Criteria 3: Entrepreneur gender*

Female entrepreneur: A female has founded and is leading the startup.

Male entrepreneur: A male has founded and is leading the startup.

*Practice Example:*

You are evaluating an investment option with a term of 2 years and a return of 7%. It concerns a social startup. The venture's mission aims to make a significant social contribution. The startup was founded and is led by a male founder with prior entrepreneurial failure experience.

|                                   | Investment option characteristics |
|-----------------------------------|-----------------------------------|
| <b>Venture mission</b>            | <u>Social</u>                     |
| <b>Entrepreneurial experience</b> | <u>Prior failure experience</u>   |
| <b>Entrepreneur gender</b>        | <u>Male</u>                       |

**Appendix B7 (Essay II) – Robustness check: instruction and practice example conjoint study**

This study will present you with various descriptions of hypothetical startups. Each founder has previous entrepreneurial experience and has failed with their prior startup.

We would like you to imagine that you are an investor evaluating each of these startup founders for a potential investment on a crowdlending/investing platform. Crowdlending allows private investors to support young companies while receiving an attractive return financially.

Assume that you recently saved €10,000 and are now looking to invest it. After each scenario, we will ask you to make an investment decision.

Each presented crowdlending investment opportunity belongs to an industry with high growth potential and strong profit margins. Always assume that the company's business plan looks sound. It is scalable, and the competitive position seems reasonable. The project duration is 2 years, and you will receive a 7% return if the project is successful.

The following criteria are available for making an investment decision:

**Criterion 1: Venture mission**

*Social mission:* It is a social startup. A social mission characterizes this social startup, as it generates revenue to achieve social objectives (e.g., an app that assists in integrating refugees into the labor market).

*Commercial mission:* It is a profit-oriented startup. This startup's commercial mission characterizes it, as it generates revenue to achieve growth without pursuing specific social objectives (e.g., an app that assists investors in financial advising/planning).

**Criterion 2: Entrepreneurs' prior experience**



*Personal reasons:* I have gained experience building a previous startup, which failed due to unfavorable economic conditions.

*External reasons:* I have gained experience building a previous startup, which failed due to my misjudgments.

### Criterion 3: Entrepreneur

*A young woman founded and runs the startup:* Anna Meyer / Marie Schmidt / Julia Weber.

*A young man founded and runs the startup:* Max Schneider / Tim Fischer / Ben Müller.

The following is a decision example to help you familiarize yourself with the type of experiment and decision scenarios. *Practice Example:*

You are evaluating a crowdlending campaign with a 2-year duration and a 7% return. It is a social startup building a digital platform to integrate refugees into the German labor market. The venture's mission is to make a significant social contribution. Tim Fischer founded and leads the startup. Tim's previous startup failed due to poor economic conditions.

How likely are you to invest in this project?

|                            | Crowdlending campaign details                                                                                            |
|----------------------------|--------------------------------------------------------------------------------------------------------------------------|
| <b>Venture mission</b>     | <u>Social mission</u>                                                                                                    |
| <b>Entrepreneur gender</b> | <u>Tim Fischer</u>                                                                                                       |
| <b>Prior experience</b>    | <u>The entrepreneur has gained experience building a previous startup, which failed due to poor economic conditions.</u> |

**Appendix B8 (Essay II) – Robustness check - Description of attributes**

| Attribute                 | Level                      | Description                                                                                                                                                                                                                                   |
|---------------------------|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Venture mission           | Social venture framing     | It is a social startup. A social mission characterizes this social startup, as it generates revenue to achieve social objectives (e.g., an app that assists in integrating refugees into the labor market).                                   |
|                           | Commercial venture framing | It is a profit-oriented startup. A commercial mission characterizes this startup, as it generates revenue to achieve growth without pursuing specific social objectives (e.g., an app that assists investors in financial advising/planning). |
| Prior failure attribution | External                   | I have gained experience in building a previous startup, which failed due to my own misjudgments.                                                                                                                                             |
|                           | Internal                   | I have gained experience in building a previous startup, which failed due to unfavorable economic conditions.                                                                                                                                 |
| Entrepreneur gender       | Woman                      | Mrs. Anna Meyer, Mrs. Marie Schmidt, Mrs. Julia Weber                                                                                                                                                                                         |
|                           | Man                        | Mr. Max Schneider, Mr. Tim Schneider, Mr. Ben Mueller                                                                                                                                                                                         |

### Appendix C1 (Essay III) – Exemplary investment profile of the metric conjoint experiment

Ventures Mission: It is a **sustainable start-up**. The mission of the start-up is to simultaneously achieve and balance social, ecological, and economic goals.

Questions and answers to prior failure:

Can you please explain how your previous failure came about?

?

!

I **miscalculated the costs**. As an entrepreneur, I could no longer cover the costs with the revenue. I take full responsibility.

Can you explain this in more detail?

?

!

It was due to **circumstances that could have been controlled**. I should have focused more on cost calculation.

Do you think you will find yourself in similar situations in the future?

?

!

Such a failure will **not happen to me again in similar situations**.

**Appendix C2 (Essay III) – Overview of study variables**

| <b>Variable</b>                    | <b>Item</b>                                                                                                                                                                                                                                                                                                                                        | <b>Scale</b>                              | <b>Reference</b>                                       |
|------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|--------------------------------------------------------|
| <i>Probability of investment</i>   | What is the probability that you would invest in this deal?                                                                                                                                                                                                                                                                                        | Likert scale 1 (low) – 7 (high)           | e.g., Lindlar and Jakob, (2024); Warnick et al. (2018) |
| <i>Crowd lender's gender</i>       | Which gender do you feel you belong to?                                                                                                                                                                                                                                                                                                            | 1= Female, 0 = male                       | e.g., Tenner and Hörisch (2021)                        |
| <i>Investment experience years</i> | Approximately how many years of investment experience do you have?                                                                                                                                                                                                                                                                                 | Open text                                 | e.g., Dinh and Wehner, (2022); Penz et al. (2022)      |
| <i>Willingness to take risks</i>   | Are you generally a person who is fully prepared to take risks or do you try to avoid taking risk?<br><br>When thinking about investing and borrowing, are you a person who is fully prepared to take risk or do you try to avoid taking risk?                                                                                                     | Likert scale 1 (low risk) – 7 (high risk) | Menkhoff and Sakha (2016)                              |
| <i>Failure knowledge</i>           | Do you have a personal or professional relationship with an entrepreneur who has experienced business failure in the past?                                                                                                                                                                                                                         | 1: yes; 0: no                             | Based on Kibler et al. (2017)                          |
| <i>Perspective taking</i>          | When there is a dispute, I try to understand both sides before making a decision.<br><br>I believe that every problem has two sides, so I try to consider both.<br><br>If someone's behavior seems strange to me, I try to put myself in their shoes for a while.<br>Before criticizing someone, I try to imagine how I would feel in their place. | Likert scale 1-7                          | Based on Davis, (1980); Shepherd and Patzelt, 2015)    |

**Appendix C3 (Essay III) – Multilevel model: Sustainable mission**

| Variables                          | DV: Willingness to invest |           |          |         |           |          |         |           |          |
|------------------------------------|---------------------------|-----------|----------|---------|-----------|----------|---------|-----------|----------|
|                                    | Model 1                   |           |          | Model 2 |           |          | Model 3 |           |          |
|                                    | $\beta$                   | <i>SE</i> | <i>p</i> | $\beta$ | <i>SE</i> | <i>p</i> | $\beta$ | <i>SE</i> | <i>p</i> |
| <i>Level -1-Variables</i>          |                           |           |          |         |           |          |         |           |          |
| Internal                           | .10                       | .08       |          | .09     | .05       | †        | .09     | .05       | †        |
| Controllable                       | .21                       | .05       | ***      | .21     | .08       | **       | .21     | .05       | ***      |
| Unstable                           | .68                       | .05       | ***      | .68     | .05       | ***      | .66     | .07       | ***      |
| Sustainable mission                | .32                       | .08       | ***      | .31     | .08       | ***      | .28     | .07       | ***      |
| <i>Level-1-Interactions</i>        |                           |           |          |         |           |          |         |           |          |
| Internal* Sustainable mission      | -.02                      | .11       |          |         |           |          |         |           |          |
| Controllable* Sustainable mission  |                           |           |          | .00     | .11       |          |         |           |          |
| Stability * Sustainable mission    |                           |           |          |         |           |          | .05     | .10       |          |
| <i>Control Variables (Level 2)</i> |                           |           |          |         |           |          |         |           |          |
| Female crowd lender                | .28                       | .13       | *        | .28     | .13       | *        | .29     | .14       | *        |
| Investment experience              | .02                       | .01       | **       | .02     | .01       | **       | .02     | .01       | **       |
| Willingness to take risks          | .06                       | .05       |          | .06     | .05       |          | .06     | .05       |          |
| Failure knowledge                  | -.33                      | .13       | *        | -.33    | .13       | *        | -.33    | .13       | *        |
| Perspective taking                 | -.12                      | .06       | †        | -.12    | .06       | †        | -.12    | .06       | †        |
| Constant                           | 3.29                      | .40       | ***      | 3.29    | .40       | ***      | 3.30    | .40       | ***      |
| <i>Variance components</i>         |                           |           |          |         |           |          |         |           |          |
| Residual variance                  | 1.74                      | .05       | ***      | 1.74    | .05       | ***      | 1.74    | .05       | ***      |
| Variance of the constant           | .20                       | .04       | ***      | .20     | .04       | ***      | .20     | .04       | ***      |

*Note.* 2,496 observations nested in  $N = 78$ ; ICC (null model) = .12; maximum likelihood estimation; random intercept fixed slope models;  $\beta$  = unstandardized coefficient; *SE* = standard error; *p* = p-value; DV = dependent variable; significance †  $p < .10$ , \*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ ; locus of causality (1: internal, 0: external); controllability (1: controllable; 0: uncontrollable); stability (1: unstable; 0: stable); Female crowd lender (1: woman; 0: man); failure knowledge (1: private/professional relationship with entrepreneur with past failure; 0: no private/professional relationship with an entrepreneur with past failure); mission (1: sustainable; 0: commercial).

## Appendix D1 (Essay IV) – Search term development, database, inclusion, and exclusion criteria

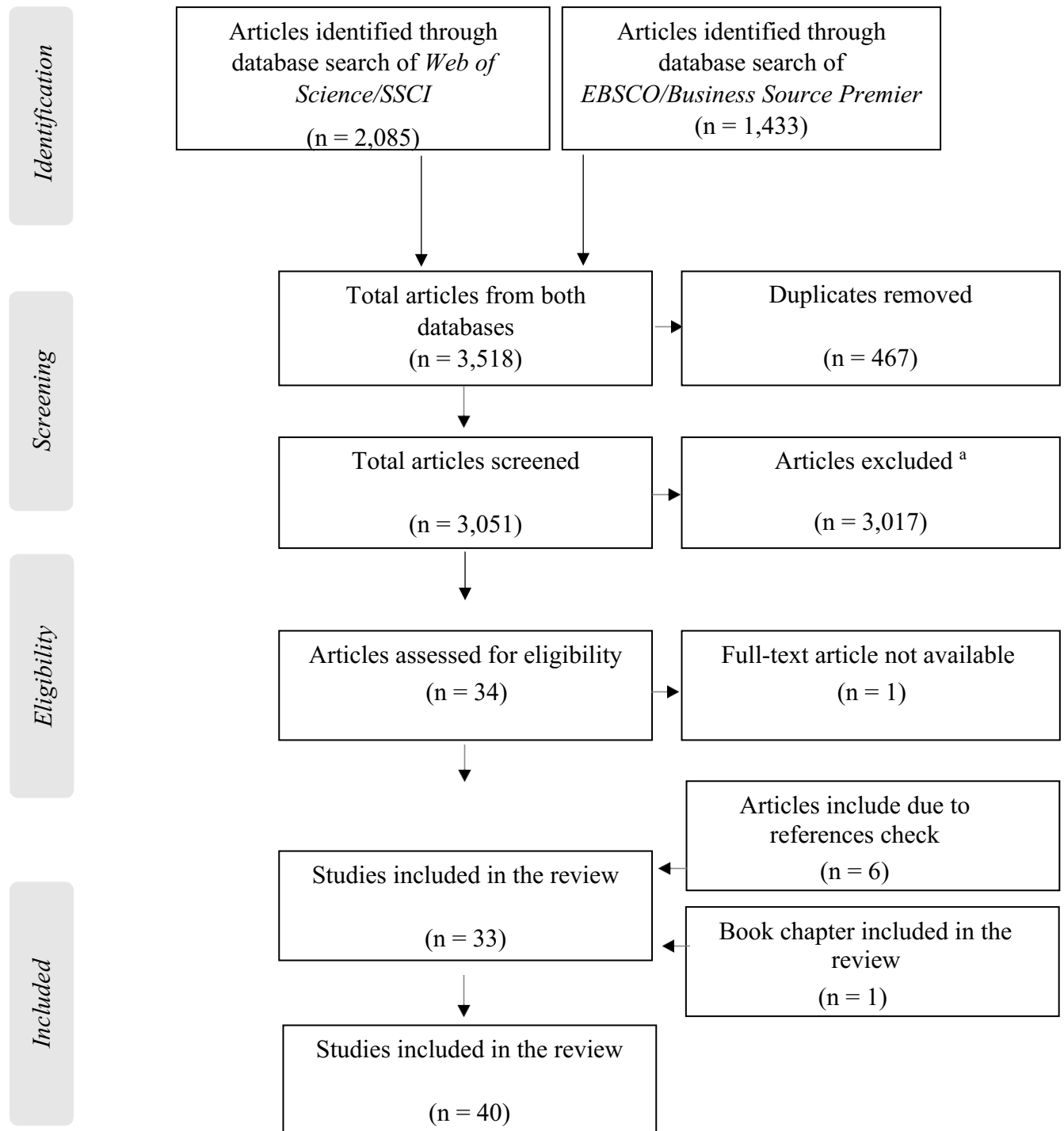
| <div><div>Failure<sup>1</sup></div><div>TITLE-ABS-KEY<br/>(fail* OR closure OR reentry OR quit* OR loss* OR insolven* OR collapse OR bankrupt* OR business fail* OR entrepreneur* fail* OR venture fail* OR “enterpri?e fail*” OR “organi?ation fail*” OR “startup fail*” OR “start up fail*” OR resilience OR liquidat* OR “business collapse” OR “financial fail*” OR “financial loss“ OR flop OR withdrawal OR leave OR evacuation OR exodus OR exit OR disengagement OR “default shock” OR “dark side”)</div></div> | AND                            | <div><div>Social entrepreneurship<sup>2</sup></div><div><div>Search term as a combination of:</div><div><div>Social<br/>Hybrid<br/>Sustainable<br/>Impact</div><div>+</div><div>Enterpri?e* Business*<br/>Entrepreneur* Venture<br/>Startup*/ Start up*/<br/>Start-up* Organi?ation*</div></div></div><div>TITLE-ABS-KEY<br/>(“social business*” OR “social entrepreneur*” OR “social venture*” OR “social startup*” OR “social start up*” OR “social enterpri?e*” OR “social organi?ation*” OR “hybrid enterpri?e*” OR “hybrid enterpri?e*” OR “hybrid business*” OR “hybrid entrepreneur*” OR “hybrid startup*” OR “hybrid start up*” OR “sustainable enterpri?e*” OR “sustainable entrepreneur*” OR “sustainable startup*” OR “sustainable start up*” OR “sustainable venture*” OR “sustainable organi?ation*” OR “environmental venture“ OR “environmentally friendly” OR “ecological business“ OR “sustainability-oriented“ OR “impact enterpri?e*” OR “impact business*” OR “impact entrepreneur*” OR “impact venture*” OR “impact startup*” OR “impact start up*” OR “impact organi?ation”)</div></div> |          |                                |                     |      |                               |      |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|--------------------------------|---------------------|------|-------------------------------|------|
| <table><tr><th>Database</th><th>Number of articles (cumulated)</th></tr><tr><td>Web of Science/SSCI</td><td>2085</td></tr><tr><td>EBSCO/Business Source Premier</td><td>1433</td></tr></table>                                                                                                                                                                                                                                                                                                                          |                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Database | Number of articles (cumulated) | Web of Science/SSCI | 2085 | EBSCO/Business Source Premier | 1433 |
| Database                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Number of articles (cumulated) |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |          |                                |                     |      |                               |      |
| Web of Science/SSCI                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 2085                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |          |                                |                     |      |                               |      |
| EBSCO/Business Source Premier                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 1433                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |          |                                |                     |      |                               |      |
| <div><div>Inclusion criteria</div><div><div>- Available articles in the English language</div><div>- Peer-reviewed academic journal articles</div><div>- Articles examining failure in social or sustainable ventures</div></div></div>                                                                                                                                                                                                                                                                                 |                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |          |                                |                     |      |                               |      |
| <div><div>Exclusion criteria</div><div><div>- Articles lacking focus on failure or social/sustainable ventures</div><div>- Duplicates within or between databases</div></div></div>                                                                                                                                                                                                                                                                                                                                     |                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |          |                                |                     |      |                               |      |

<sup>1</sup> Search term for failure adapted from Lee et al. (2022)

<sup>2</sup> Search term for social entrepreneurship adapted from Schätzlein et al. (2022)

*Note.* In the search string, an asterisk (\*) acts as a placeholder, allowing for any sequence of characters to follow the word’s root, while quotation marks (“”) are used to search for precise matches of phrases

## Appendix D2 (Essay IV) – Prisma flow chart screening process



<sup>a</sup> Topic out of scope, mostly no failure or exit scope within social and sustainable ventures

## Appendix D3 (Essay IV) – Included articles in the review

| Phase       | Article                   | Research field                                   | Type        | Method               | Main focus                                                                                                                                                                                                                                                                                                                                 | Key findings                                                                                                                                                                                                                                                                                                                                                                                                 | Theory | Geography       | Journal                                           |
|-------------|---------------------------|--------------------------------------------------|-------------|----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|-----------------|---------------------------------------------------|
| Pre-failure | Amjad et al. (2020)       | Entrepreneurship Education                       | Conceptual  | Theoretical Analysis | The study focuses on identifying pedagogical gaps in entrepreneurial marketing (EM) education and its impact on sustainable entrepreneurship development.                                                                                                                                                                                  | The study found that lack of entrepreneurial marketing skills, due to outdated or misaligned pedagogies in business schools, is a major cause of entrepreneurial failure among sustainable ventures.                                                                                                                                                                                                         | N/A    | N/A             | The International Journal of Management Education |
|             | Battistella et al. (2021) | Social Entrepreneurship and Innovation           | Qualitative | Multiple-Case-Study  | The study investigates the development process of social innovations within social start-ups, identifying the challenges they face and the mechanisms they employ to avoid failure.                                                                                                                                                        | Social ventures are prone to failure due to a lack of expertise in social issues, insufficient awareness of the benefits of social innovation, and a weak understanding of the impact and sustainability of their innovations; addressing these challenges requires strategic mechanisms to enhance their success.                                                                                           | N/A    | Italy           | Creativity and Innovation Management              |
|             | Bocken (2015)             | Sustainable Entrepreneurship and Venture Capital | Qualitative | Interviews           | The study's main focus is to investigate the role of venture capital investors in contributing to the success of sustainable start-ups, with a particular emphasis on understanding the factors that lead to both success and failure in this context.                                                                                     | Key findings indicate that a lack of suitable venture capitalists with knowledge of sustainability and a short-term investor mindset are significant factors contributing to the failure of sustainable start-ups. Additionally, many ventures struggle against strong existing industries and face common start-up challenges, underscoring the need for a robust business case beyond just sustainability. | N/A    | Europe and U. S | Journal of Cleaner Production                     |
|             | Bruneel et al. (2016)     | Social Entrepreneurship                          | Qualitative | Case study           | The study investigates the failure of a social enterprise, Metalcon, emphasizing the importance of balancing social and commercial logics. The main failure was attributed to a neglect of the commercial logic driven by the firm's strong social values and stakeholder pressures, resulting in organizational imbalance and bankruptcy. | The study found, that the enterprises failure was primarily caused by overemphasis on social employment logic, stakeholder reinforcement, and inadequate hybrid governance, leading to an inability to manage competing demands                                                                                                                                                                              | N/A    | Belgium         | Journal of Social Entrepreneurship                |



| Phase       | Article                  | Research field                                | Type                   | Method                                             | Main focus                                                                                                                                                                                          | Key findings                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Theory                                | Geography      | Journal                                           |
|-------------|--------------------------|-----------------------------------------------|------------------------|----------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|----------------|---------------------------------------------------|
| Pre-failure | Del Gaudio et al. (2025) | Sustainable Entrepreneurship and Crowdfunding | Empirical-quantitative | Secondary data analysis                            | The study's main focus is on the impact of equity crowdfunding on the survival of sustainable ventures.                                                                                             | Equity crowdfunding confers long-term benefits, leading to lower failure rates for sustainable ventures, especially those outside the technology sector. Non-tech sustainability ventures are less likely to fail than tech counterparts.                                                                                                                                                                                                                                                                  | Warm glow theory                      | United Kingdom | Finance Research Letters                          |
|             | Donaldson et al. (2024)  | Social Entrepreneurship and Education         | Qualitative            | Fuzzy-set Qualitative Comparative Analysis (fsQCA) | This study explores how fear of failure (fof) influences social entrepreneurship intentions (SEI).                                                                                                  | Fear of failure is a complex, multidimensional construct that influences social entrepreneurship intentions through various interacting dimensions. It identifies specific configurations of fear that can either promote or inhibit these intentions, emphasizing the need for entrepreneurship education to address these emotional factors effectively.                                                                                                                                                 | Theory of planned behavior            | Spain          | The International Journal of Management Education |
|             | Esau et al. (2025)       | Sustainable Entrepreneurship                  | Qualitative            | Longitudinal Case Study                            | The study explores the evolution of business models in nascent sustainable ventures.                                                                                                                | Teams with a narrow cognitive frame are more likely to fail due to being locked into decisions made early in development, leading to mission drift; effective management of paradoxical tensions is crucial for survival.                                                                                                                                                                                                                                                                                  | N/A                                   | Germany        | Strategic Entrepreneurship Journal                |
|             | Granados et al. (2022)   | Entrepreneurship                              | Qualitative            | Interviews                                         | This article examines how barefoot institutional entrepreneurship efforts, particularly those of marginalized waste pickers in Colombia, fail amidst resistance from powerful institutional actors. | The study reveals a paradox of inclusion where regulatory changes intended to support the market inclusion of marginalized waste pickers in Colombia actually exacerbated their exclusion due to resistance from powerful actors who employed various overt and covert power mechanisms. Despite their efforts to legitimize their presence and organize collectively, the waste pickers faced significant challenges that highlighted the limitations of entrepreneurship in contexts of extreme poverty. | Institutional entrepreneurship theory | Cali, Colombia | Journal of Business Venturing                     |

| Phase       | Article                     | Research field               | Type                   | Method                  | Main focus                                                                                                                                                                                                                                                                                                 | Key findings                                                                                                                                                                                                                                                                                                                                                                                                           | Theory               | Geography              | Journal                            |
|-------------|-----------------------------|------------------------------|------------------------|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|------------------------|------------------------------------|
| Pre-failure | Günzel-Jensen & Rask (2021) | Sustainable Entrepreneurship | Qualitative            | Case Study              | The main focus of the study is understanding how stakeholder commitments, while necessary for mobilizing resources and legitimacy in environmental entrepreneurship, can inadvertently lead to organizational rigidity, reduced flexibility, and learning constraints, which increase the risk of failure. | The key findings highlight that overconfidence, identity lock-ins, and dependency on stakeholder support create paradoxical tensions that hinder adaptation and innovation, ultimately contributing to the collapse of ventures like Better Place. Recognizing these paradoxes is crucial for managing failure in grand environmental challenges.                                                                      | Paradox theory       | U.S.                   | Journal of Cleaner Production      |
|             | Hoogendoorn et al. (2019)   | Sustainable Entrepreneurship | Empirical-quantitative | Secondary data analysis | The paper's main focus is to explore the perceived barriers and risks faced by sustainable entrepreneurs compared to regular entrepreneurs, particularly when starting a business.                                                                                                                         | Sustainable entrepreneurs exhibit a significantly higher fear of personal failure than regular entrepreneurs, linked to their complex stakeholder relationships and the reputational risks they face. Despite similar overall risk attitudes, this heightened fear of personal failure underscores the need for tailored support structures to address the unique challenges encountered by sustainable entrepreneurs. | N/A                  | 33 countries           | Journal of Business Ethics         |
|             | Jace et al. (2022)          | Sustainable Entrepreneurship | Empirical-quantitative | Econometric modeling    | The study focuses on investigating the factors influencing bankruptcy in social enterprises.                                                                                                                                                                                                               | The study finds that, unlike traditional firms, social enterprises with larger boards and higher employee-to-sales ratios face a greater likelihood of bankruptcy, while profitability and liquidity serve as protective factors against failure.                                                                                                                                                                      | N/A                  | Italy, Belgium, Serbia | Journal of Social Entrepreneurship |
|             | Jay (2013)                  | Organizational Studies       | Qualitative            | Field Study             | The study aims to understand how hybrid organizations navigate paradoxes arising from combining multiple institutional logics (e.g., public service vs. client service) and how this affects organizational change and innovation.                                                                         | Failures were paradoxical—projects seen as failures under a business logic (no revenue) were successes under a public logic (city-level impact). This ambiguity triggered sensemaking, reshaped organizational identity, and enabled innovation through hybrid logic synthesis.                                                                                                                                        | Institutional theory | U.S.                   | Academy of Management Journal      |

| Phase       | Article                           | Research field          | Type                   | Method                  | Main focus                                                                                                                                                                                                                                                                    | Key findings                                                                                                                                                                                                                                                                                                                                                                                                                      | Theory                                               | Geography    | Journal                              |
|-------------|-----------------------------------|-------------------------|------------------------|-------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------|--------------|--------------------------------------|
| Pre-failure | B. Lee, (2025)                    | Social Entrepreneurship | Empirical-quantitative | Secondary data analysis | The study examines how fear of failure influences the growth aspirations of social entrepreneurs and how their social value orientation moderates this relationship.                                                                                                          | The study finds that fear of failure reduces the growth aspirations of social entrepreneurs. However, this adverse effect is less pronounced among those with a strong social value orientation, suggesting that a commitment to social value creation buffers against the dampening impact of fear.                                                                                                                              | Fear of failure framework & Social value orientation | 58 countries | International Small Business Journal |
|             | C. K. Lee, Simmons, et al. (2022) | Social Entrepreneurship | Empirical-quantitative | Secondary data analysis | This article investigates how informal institutions, such as societal attitudes, cultural norms, and unwritten rules, affect social entrepreneurship activities.                                                                                                              | The study finds that the stigma of business failure is positively associated with social entrepreneurship activity, suggesting that it may motivate individuals to engage in social ventures despite the risks involved. Additionally, the impact of this stigma is moderated by cultural contexts, with performance-based and socially supportive cultures reducing their influence on entrepreneurial decisions and strategies. | Institutional theory                                 | 16 countries | Journal of Social Entrepreneurship   |
|             | Martin et al. (2024)              | Social Entrepreneurship | Qualitative            | Single Case Study       | The main focus of the study is to explore how an inclusivity-focused social enterprise's over-reliance on effectual logic during rapid scaling efforts led to its failure, highlighting the ethical implications and offering guidance for ethically scaling social ventures. | The key findings revolve around the misuse of effectual logic in a phase of the organization's development where more structured, predictive planning (causal logic) was necessary. This strategic misalignment led to the enterprise's failure.                                                                                                                                                                                  | Effectuation theory and social enterprise scaling    | N/A          | Journal of Business Ethics           |

| Phase | Article                  | Research field          | Type                         | Method                                  | Main focus                                                                                                                                                                                                                                            | Key findings                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Theory                    | Geography                                    | Journal                                |
|-------|--------------------------|-------------------------|------------------------------|-----------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|----------------------------------------------|----------------------------------------|
|       | Muñoz et al. (2020)      | Entrepreneurship        | Qualitative                  | Verbal Protocol Analysis (VPA)          | The main focus of the research is to compare the decision-making processes of social and commercial entrepreneurs when faced with failing ventures, specifically examining how the nature of the venture influences their choices to persist or exit. | The key findings indicate that both social and commercial entrepreneurs' exit decisions are significantly influenced by the nature of the venture they are managing, with social entrepreneurs showing a stronger inclination to persist in order to maintain their social mission. Additionally, the cognitive effort and decision-making processes differ between the two groups, as social entrepreneurs prioritize stakeholder considerations, while commercial entrepreneurs weigh both persistence and exit options more equally. | Situated cognition theory | N/A                                          | Journal of Business Venturing Insights |
|       | Njirani et al. (2024)    | Social Entrepreneurship | Qualitative and Quantitative | Mixed-Method                            | The study aims to investigate whether the failures of social enterprises run by Catholic sisters are due to mission drift or simply failures, examining the underlying causes of these issues.                                                        | The study identifies 19 causes of failure, largely stemming from leadership lapses, capacity and skills gaps, funding challenges, and inadequacies in monitoring and evaluation. It highlights that inactive projects are common, particularly in farming and agriculture.                                                                                                                                                                                                                                                              | Mission drift theory      | Africa (Kenya, Uganda, Tanzania, and Zambia) | Social Enterprise Journal              |
|       | Nuer et al., (2016)      | Social Entrepreneurship | Qualitative                  | Case Study supported through Interviews | This research explores the specificities of social entrepreneurs' exit strategies, particularly how these strategies differ from traditional for-profit exits.                                                                                        | The study found that social ventures' exit strategies are significantly influenced by their original social goals and stakeholders' diverse perceptions, leading to complex decision-making processes regarding ownership transfer and sustainability. Additionally, the social entrepreneur prioritized ensuring the venture continued serving the community's needs post-exit.                                                                                                                                                        | N/A                       | Tanzania                                     | Africa Journal of Management           |
|       | Scott & Teasdale, (2012) | Social Entrepreneurship | Qualitative                  | Case Study                              | The research focuses on how failure reasons can extend beyond individualistic and governmental reasons.                                                                                                                                               | The study shows social enterprises fail due to conflicting institutional logics, where funders prioritized measurable outcomes while social enterprises focused on community-based goals. This misalignment, reinforced by poor governance and the external environment.                                                                                                                                                                                                                                                                | N/A                       | United Kingdom                               | Voluntary Sector Review                |

| Phase       | Article                | Research field                              | Type                   | Method                   | Main focus                                                                                                                                                                                                                                                                                       | Key findings                                                                                                                                                                                                                                                                                                                                                                                                                    | Theory                                  | Geography      | Journal                                                  |
|-------------|------------------------|---------------------------------------------|------------------------|--------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|----------------|----------------------------------------------------------|
| Pre-failure | Shahid (2023)          | Entrepreneurship                            | Empirical-quantitative | Survey                   | The study's primary focus is to investigate how perceived barriers and self-efficacy influence entrepreneurial (sustainable and regular entrepreneurs) exit intentions among entrepreneurs in the UK.                                                                                            | The study finds that perceived barriers, such as inadequate institutional support and environmental challenges, are positively associated with entrepreneurs' intentions to exit their ventures, with self-efficacy acting as a crucial mediating factor. Furthermore, the type of entrepreneurship, whether sustainable or regular, moderates the effect of these barriers on exit intentions.                                 | Social cognitive theory                 | United Kingdom | European Business Review                                 |
|             | Singaram et al. (2024) | Social Entrepreneurship                     | Empirical-quantitative | Metric Conjoint Analysis | The primary focus of the study is to explore the varied exit intentions of social venture founder-CEOs, emphasizing the role of social impact achievement in shaping their decision-making and classifying them into distinct preference groups.                                                 | The study identified four distinct groups of social venture founders based on their exit intentions: never-exit idealists, impact-focused traditionalists, growth-oriented realists, and exit-oriented pragmatists. Founders prioritized social impact over financial sustainability and organizational capability, indicating a strong commitment to mission continuity even in the face of poor venture performance.          | Threshold theory and stewardship theory | Indonesia      | Entrepreneurship Theory and Practice                     |
|             | Siwale et al. (2021)   | Entrepreneurship and Organizational Studies | Qualitative            | Interviews               | The study's main focus is to investigate how legitimization processes and the navigation of competing institutional logics contribute to the failure of hybrid organizations, specifically through a case study of the Christian Enterprise Trust of Zambia (CETZAM) in the microfinance sector. | The key findings indicate that CETZAM's failure was marked by a misalignment between its social mission and the commercial banking logic it adopted, leading to a crisis of identity and mission. Additionally, the study reveals that over-conforming to stakeholder expectations, particularly from investors, ultimately eroded the organization's ability to effectively serve its original purpose of poverty alleviation. | Legitimacy theory                       | Zambia         | Management and Organization Review                       |
|             | Urbano et al. (2017)   | Social Entrepreneurship                     | Empirical-quantitative | Secondary data analysis  | The study's main focus is the role of institutional frameworks and social-market failures in social venture emergence and implementation.                                                                                                                                                        | The key findings indicate that informal institutions, such as fear of failure influence social entrepreneurial activity in Spain.                                                                                                                                                                                                                                                                                               | Institutional Economics                 | Spain          | Social Entrepreneurship in Non-Profit and Profit Sectors |

| Phase        | Article                       | Research field                                      | Type                   | Method                  | Main focus                                                                                                                                                                                                                     | Key findings                                                                                                                                                                                                                                                                                                                                                                                                     | Theory                     | Geography    | Journal                                          |
|--------------|-------------------------------|-----------------------------------------------------|------------------------|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|--------------|--------------------------------------------------|
| Pre-failure  | Wei et al. (2024)             | Social Entrepreneurship                             | Empirical-quantitative | Secondary data analysis | The study's main focus is to examine how the intensity of natural disasters, combined with personal attributes such as gender, human capital, and fear of failure, influences social entrepreneurship at the individual level. | The study finds that the intensity of natural disasters positively affects social entrepreneurship, particularly among men, individuals with lower human capital, and those who fear failure. Additionally, it highlights that personal attributes significantly shape how individuals respond to natural disasters regarding their entrepreneurial activities, suggesting a relationship between these factors. | Attention-based view       | 30 countries | Small Business Economics                         |
|              | Wronka-Pospiech (2018)        | Social Entrepreneurship and Entrepreneurial Failure | Qualitative            | Interviews              | The study's primary focus is to investigate the underlying reasons for social entrepreneurs' failure and to highlight the importance of discussing failure for the benefit of current and future social enterprises.           | The study's key findings reveal that social ventures often fail due to financial instability, mission drift, and internal conflicts, which hinder their ability to achieve social and environmental impact.                                                                                                                                                                                                      | N/A                        | Poland       | International Journal of Contemporary Management |
|              | Zhang et al. (2022)           | Social Entrepreneurship                             | Empirical-quantitative | Secondary data analysis | The study primarily investigates how the traits of social entrepreneurs influence the innovativeness of social ventures, considering the impact of varying market dynamics on this relationship                                | The study highlights that fear of failure among social entrepreneurs negatively impacts social venture innovation, indicating that this psychological barrier can hinder the decision-making process related to innovation, regardless of market dynamics.                                                                                                                                                       | Social cognitive theory    | 30 countries | Journal of the Knowledge Economy                 |
| Post-failure | Anokhin et al. (2023)         | Social Entrepreneurship                             | Empirical-quantitative | Secondary data analysis | The study focuses on investigating how local market and government failures influence Ohio's social venture creation rates during the post-crisis recovery period.                                                             | The study found that social venture creation rates are highest in Ohio counties characterized by high unemployment and low transfer payments, indicating that both market and government failures can drive entrepreneurial activity in response to social needs.                                                                                                                                                | Social embeddedness theory | Ohio, U. S   | Strategic Entrepreneurship Journal               |
|              | Beaton & Dowin Kennedy (2021) | Social Entrepreneurship and Public Management       | Conceptual Research    | Qualitative Analysis    | The article focuses on distinguishing between market reallocating and market mending social enterprises in addressing market failure.                                                                                          | Social ventures that are reallocators capture revenue for social programs, while menders innovate to address market failures, and it highlights the need for different funding and governance structures for each type.                                                                                                                                                                                          | Market failure theory      | N/A          | Public Management Review                         |

| Phase        | Article                  | Research field                    | Type                   | Method                                    | Main focus                                                                                                                                                    | Key findings                                                                                                                                                                                                                                                                                                                                                                                     | Theory                 | Geography           | Journal                                   |
|--------------|--------------------------|-----------------------------------|------------------------|-------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|---------------------|-------------------------------------------|
| Post-failure | Dacin et al. 2010        | Social Entrepreneurship           | Conceptual Research    | Literature Analysis                       | Examining social entrepreneurship as a context for applying established entrepreneurial theories, with emphasis on understanding success and failure dynamics | Failure recognition and analysis are essential for sustainability; social entrepreneurs experience significant emotional and strategic challenges, and more research is needed to understand failure dynamics in social missions.                                                                                                                                                                | N/A                    | N/A                 | Academy of Management Perspectives        |
|              | Drencheva et al., (2023) | Social Entrepreneurship           | Qualitative            | Interviews                                | How members of social enterprises experience and interpret impact, especially when impact is questioned or not perceived as intended.                         | Members of social enterprises often face cues indicating their impact is less than anticipated or not realized, leading to doubts about the effectiveness of their work. They respond by internalizing impacts, reframing impact as invisible or slow to materialize, and creating psychological closeness to impact and beneficiaries.                                                          | Sensemaking theory     | Malaysia            | Business & Society                        |
|              | Hornuf et al. (2021)     | Entrepreneurship and Crowdfunding | Empirical-quantitative | Secondary data analysis                   | The study focuses on the investment behavior of sustainability-oriented investors in equity crowdfunding, examining their reactions to insolvencies.          | Sustainability-oriented investors tend to pledge larger amounts and invest more frequently compared to ordinary crowd investors. Moreover, they react more severely to insolvencies in their portfolios, indicating that their investment decisions are significantly influenced by non-financial motives.                                                                                       | Prospect theory        | Austria and Germany | The Journal of Technology Transfer        |
|              | Kachlami (2017)          | Social Entrepreneurship           | Empirical-quantitative | Feasible generalized least squares (FGLS) | The study aims to understand how social venture entry, exit, and density influence regional commercial venture entry rates.                                   | The study finds that the entry and density of social ventures negatively influence the entry rate of commercial ventures, indicating competitive dynamics for local resources. Conversely, the exit of social ventures positively impacts the entry rate of commercial ventures, suggesting that the departure of social entities creates opportunities for commercial ones to enter the market. | Organizational ecology | Sweden              | International Journal of Social Economics |

| Phase        | Article                   | Research field                                      | Type                   | Method                                  | Main focus                                                                                                                                                                                                                                                                      | Key findings                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Theory                                          | Geography      | Journal                       |
|--------------|---------------------------|-----------------------------------------------------|------------------------|-----------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|----------------|-------------------------------|
| Post-failure | Lindlar et al. (2025)     | Entrepreneurship and Crowdfunding                   | Empirical-quantitative | Mixed                                   | The study primarily investigates crowd investors' reactions, in terms of future investment behavior, to the venture failure of sustainable and commercial entrepreneurs.                                                                                                        | The study found that the crowdfunding experience influences crowd investors' reactions to failure signals. Specifically, experienced crowd investors tend to be less forgiving of environmental than commercial campaigns compared to inexperienced crowd investors. An additional empirical study (post hoc survey) indicates that a possible explanation for these differences may be found in the specific personal values of crowd investors.            | Signaling theory                                | Germany        | Small Business Economics      |
|              | Seanor & Meaton (2008)    | Organizational Studies and Social Entrepreneurship  | Qualitative            | Case Study supported through Interviews | The article explores how participants in social ventures learn from failure and navigate the complexities of ambiguity and trust within their organizational networks.                                                                                                          | The key findings indicate that failure in social ventures extends beyond financial insolvency to include unmet social aims and socio-political expectations, highlighting the importance of learning from these experiences. Additionally, the study reveals that ambiguity and mistrust within networks can hinder communication and support, suggesting that addressing these issues is crucial for the development and sustainability of social ventures. | Sydow's framework of inter-organizational trust | United Kingdom | Social Enterprise Journal     |
|              | Patzelt & Shepherd (2023) | Social Entrepreneurship and Organizational Behavior | Conceptual Research    | N/A                                     | The article develops a fatigue model of social venturing, examining how prosocial motivation drives social-venturing efforts. This can lead to social-venturing fatigue in entrepreneurs, ultimately resulting in disengagement and failure.                                    | The article's key findings indicate that social-venturing fatigue can diminish entrepreneurs' prosocial motivation and lead to detachment from their targets, potentially resulting in their exit from social-venturing activities.                                                                                                                                                                                                                          | N/A                                             | N/A            | Small Business Economics      |
|              | Shepherd & Patzelt (2015) | Entrepreneurship and Organizational Behavior        | Empirical-quantitative | Metric Conjoint Analysis                | The study investigates how the attributes of entrepreneurs and observers influence the harshness of evaluations of entrepreneurs who experience business failure, particularly examining the impact of sexual orientation and the use of environmentally friendly technologies. | The study found that entrepreneurs who are homosexual are evaluated more harshly for their failures compared to their heterosexual counterparts. Conversely, entrepreneurs using environmentally friendly technologies receive more favorable evaluations for their failures, especially those with high perspective-taking, indicating that prosocial intentions can mitigate negative judgments.                                                           | Attribution theory                              | Germany        | Journal of Management Studies |



| Phase        | Article                  | Research field                                      | Type                   | Method                 | Main focus                                                                                                                                                                                                                                                                          | Key findings                                                                                                                                                                                                                                                                                                                                                                                                                         | Theory                        | Geography | Journal                            |
|--------------|--------------------------|-----------------------------------------------------|------------------------|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|-----------|------------------------------------|
| Post-failure | Smollan & Singh (2021)   | Social Entrepreneurship and Organizational Behavior | Conceptual Research    | N/A                    | The study examines the cognitive, affective, and behavioral responses of social entrepreneurs to venture failure and compares them to those of commercial entrepreneurs.                                                                                                            | The key findings of the article indicate that social entrepreneurs experience unique cognitive, affective, and behavioral responses to failure, often feeling a more significant burden due to their dual goals of social impact and financial sustainability.                                                                                                                                                                       | N/A                           | N/A       | Journal of Social Entrepreneurship |
|              | Van Gils & Horton (2019) | Customer Behavior and Service Management            | Empirical-quantitative | Mixed                  | The main focus of this research on service failures in ethical brands is to understand failure causes, customer reactions, effective recovery strategies aligned with ethical values, perceptions of justice, and the long-term impact on customer relationships and brand loyalty. | The study highlights that ethical brands can enhance customer satisfaction by aligning their service recovery strategies with their customers' moral identities. Ethical brands that offer private apologies and compensation resonate better with customers with high moral identity internalization, while those that provide public recognition and compensation appeal more to customers with high moral identity symbolization. | Justice theory                | U.S.      | Journal of Business Research       |
|              | Wang et al. (2024)       | Social Entrepreneurship and Organizational Behavior | Empirical-quantitative | Survey                 | The study primarily investigates the impact of learning from failure on the growth performance of social ventures in China, emphasizing the mediating role of resource orchestration in this relationship.                                                                          | The research reveals that learning from failure significantly enhances the growth performance of social ventures, with resource orchestration serving as a crucial mediating factor in this process. The normalization of failure within the organizational culture positively moderates both the relationship between learning from failure and growth performance.                                                                 | Resource orchestration theory | China     | Current Psychology                 |
|              | Wronka-Pośpiech (2020)   | Social Entrepreneurship and Entrepreneurial Failure | Qualitative            | Focos Group Interviews | This study focus on the understanding of how social entrepreneurs perceive, experience, and discuss failure, including its causes and consequences.                                                                                                                                 | Failure is seen as both a learning opportunity and a setback; main factors include financial instability and mission drift; failure impacts emotional well-being and social reputation.                                                                                                                                                                                                                                              | N/A                           | Poland    | Social Entrepreneurship Review     |