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# Attachment-based retrospective classifications of parental caregiving in childhood related to psychological well-being and mental health in young adults

Eva Neumann<sup>1</sup> · Elke Rohmann<sup>2</sup>

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## Abstract

Adverse interpersonal experiences in childhood have been shown to be associated with low psychological well-being and poor mental health in adulthood. In this study, the Parental Caregiving Style Questionnaire (PCS-Q) was used for the retrospective classification of parental caregiving, a measure distinguishing between warm/responsive, ambivalent/inconsistent and cold/rejecting parenting, analogous to the three-category model of attachment. Furthermore, self-esteem, satisfaction with the romantic relationship and life, depression and anxiety were measured with self-report scales. 197 students took part in this study, of whom 74 answered the PCS-Q a second time two months later. Most participants classified the parental caregiving style as warm/responsive, especially with regard to the mother. The PCS-Q showed a high test-retest reliability. Warm/responsive parenting was associated with higher self-esteem and life satisfaction and with lower depression and anxiety than the other two parenting styles. Satisfaction with the romantic relationship, however, did not differ substantially between the three groups. The findings largely support the assumption that early attachment experiences have an impact on later well-being and mental health. The German version of the PCS-Q presented here can be used in research and clinical practice as an economic measure with direct reference to the model of attachment styles.

**Keywords** Parental caregiving · Self-esteem · Relationship satisfaction · Life satisfaction · Depression · Anxiety

The role of early attachment experiences in psychological well-being and mental health in later life has been an important subject of attachment theory since its beginnings. Bowlby (1969/82) postulated that children develop internal working models of attachment depending on the nature of their experiences with primary caregivers. Sensitive and responsive parenting leads to positive representations of the self and important others, while these representations are likely to be negative when insensitive or even rejecting parenting is experienced. The association between parental

behavior and representations of the self is based on identification, a process that leads people to treat themselves the way attachment figures treated them (Mikulincer & Shaver, 2004). In this way, early attachment experiences are closely associated with adult self-esteem. Furthermore, the relationship with parents in childhood is supposed to be a model for close relationships in later life, a theoretical approach called “prototype perspective” by Fraley (2002). Following this perspective, it is likely that insensitive parenting in childhood is associated with experiencing adult close relationships as unsatisfying and unhappy.

The consequences of adverse attachment experiences in childhood can go beyond stress through negative perceptions of the self and of close relationships. According to Bowlby (1973, 1980), experiences such as the failure to form a secure bond with attachment figures or the loss of a parent through death increase the vulnerability for mental diseases in adulthood. He outlined these associations for depression and anxiety, in particular. The experience that attachment figures are unresponsive or unavailable can create a

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sense of abandonment, which in turn leads to feelings of helplessness in situations where support from an attachment figure is needed (Bowlby, 1980). These negative schemas make a person vulnerable for a depressive response when confronted with stressful events in later life, a proposition that corresponds with cognitive models of depression (Beck et al., 1987; Seligman, 2007). Furthermore, not receiving support from attachment figures in threatening situations evokes feelings of fear (Bowlby, 1973). As a result, the world is experienced as a dangerous place, accompanied by the belief of not being able to cope alone with threats and dangers and not receiving help from others. These emotions and cognitions increase the risk for developing an anxiety disorder in later life.

### Empirical evidence for associations of early attachment with later mental state

There are many studies on the associations of attachment with psychological well-being and mental health in adulthood, most of which found empirical support for the thesis that insecure attachment is associated with negative emotionality and psychopathology (Mikulincer & Shaver, 2016). The majority of these studies, however, refers to attachment representations of relationships in adulthood, notably romantic relationships. Studies linking attachment experiences in childhood to adult mental states are rarer. An obvious reason that there are fewer studies on this subject is the long time period between childhood and adulthood, which makes longitudinal testing difficult. This research question is therefore primarily pursued in cross-sectional studies in which parental caregiving is assessed retrospectively.

Studies using this methodological approach found that early parenting is associated with various indicators of psychological well-being in later life. For example, recollections of parental caregiving proved to be correlated with self-esteem (Cheng & Furnham, 2004; Koutra et al., 2022; Shen et al., 2021; Yamawaki et al., 2011). Further correlations were shown with regard to relationship satisfaction (Finzi-Dottan & Schiff, 2022), life satisfaction (Petrowski et al., 2009; Yamawaki et al., 2011) and happiness (Cheng & Furnham, 2004). There is also evidence for unspecific associations with various mental disorders (Enns et al., 2002) as well as associations specifically with depression and anxiety (Klein et al., 2020; Koutra et al., 2022). Since mothers are the primary caregivers in many families, it could be assumed that maternal caregiving has a stronger effect than paternal caregiving, but such a difference was found only occasionally (Enns et al., 2002; Finzi-Dottan & Schiff, 2022).

### Measures for the retrospective assessment of parental caregiving

The most established measures for the retrospective assessment of parental caregiving are the Parental Bonding Instrument (PBI, Parker et al., 1979, German version Benz et al., 2022) and the Egna Minnen Beträffande Uppfostran (EMBU, Perris et al., 1980, German version Schumacher et al., 2000). The PBI measures the two dimensions “care” and “overprotection”, the EMBU the three dimensions “emotional warmth”, “rejection/punishment” and “control/overprotection”, separately for maternal and paternal caregiving. These subscales relate to the quality of parental caregiving and thus to a central aspect of the attachment bond between parent and child. However, PBI and EMBU are not based on measurement models of attachment, i.e., they do not measure parental caregiving analogous to attachment styles or dimensions.

### An attachment-based retrospective measure of parental caregiving

A measure with direct reference to the three-category model of attachment is the Parental Caregiving Style Questionnaire (PCS-Q, Hazan & Shaver, 1986). This model differentiates between secure, anxious and avoidant attachment (Ainsworth et al., 1978; Hazan & Shaver, 1987). The secure style is characterized by a balance between closeness and distance in relationships with significant others. Such a balance is not found in the other two styles, as the anxious style shows more proximity-seeking and the avoidant style more distancing behavior. Analogous to these three attachment styles, the PCS-Q describes three patterns of parental behavior towards the child: warm/responsive, ambivalent/inconsistent and cold/rejecting.

Studies using this instrument found evidence for associations between parental caregiving styles and indicators of adult well-being. Collins and Read (1990) showed that retrospective assessments of parental caregiving with this measure are associated with self-esteem. Warm/responsive maternal caregiving proved to come along with better self-esteem than the other two styles. Furthermore, both parents’ caregiving style was associated with adult romantic attachment in this study, with respondents reporting warm/responsive parental caregiving showing more attachment security in romantic relationships. Similarly, Dale (2013) found that warm/responsive parenting is associated with secure and ambivalent/inconsistent or cold/rejecting parenting with insecure adult attachment. The effect sizes of these associations were moderate.

In two studies the German version of the PCS-Q (PCS-Q-G) was used (Neumann, 2002; Neumann & Tress, 2007). The first study was conducted in a university setting and has a student sample, while the second study was carried out in a psychosomatic hospital with a clinical sample of patients diagnosed with a mental disorder of moderate severity. The distribution of parental caregiving styles in these two different samples is shown on the left in Table 1. The students from the first study often classified their parents' caregiving style as warm/responsive, which is especially true of the mother's style. The other two styles, especially the cold/rejecting style, were rarely chosen in this sample. In contrast, the patients who participated in the second study classified parental caregiving in less than half the cases as warm/responsive and more often as ambivalent/inconsistent or cold/rejecting. This pattern of results suggests that recollections of parental caregiving are rather positive in non-clinical samples, while psychotherapy patients often remember unsensitive and inadequate parenting.

Neumann (2002) related the PCS-Q-G classifications to the two dimensions of adult attachment, avoidance and anxiety. Contrary to expectations, attachment dimensions showed no significant differences depending on recollected parental caregiving style.

## Purpose of the present study

The aim of the present study was to investigate further whether recollections of early attachment experiences are associated with psychological well-being and mental health in adulthood. Since the measurement of these experiences should be based directly on measurement models of attachment theory, parental caregiving was assessed using the PCS-Q. Psychological well-being and mental health were defined in terms of self-esteem, relationship satisfaction, life satisfaction, depression and anxiety.

## Method

### Participants and procedure

The participants of this study were recruited via campus-wide flyers at the Ruhr University Bochum, postings by email and invitations via social platforms (e.g., Facebook). The data were collected online using QuestBack Unipark's EFS survey (<https://www.unipark.de>). There were two times of measurement with an interval of two months. At Time 1, all scales used in this study were administered, at Time 2 the PCS-Q-G was administered a second time to test the stability of the assessment.

At the first time of measurement, 197 subjects took part in the study, 156 women (79.2%) and 41 men (20.8%) with a mean age of 23.22 years ( $SD=6.42$ ). Most of the participants were students ( $n=175$ , 88.8%), of whom 140 (71.1%) were undergraduate psychology students, 27 (13.7%) studied another subject, and 8 (4.1%) did not indicate their field of study. Of the 22 (11.2%) non-student participants, 11 (5.6%) were employed, 5 (2.5%) were in training, and 6 (3.1%) indicated another status, including unemployment, retirement and raising children. Concerning relationship status, 46 (23.4%) were singles, 138 (70.1%) had a romantic partner without being married, and 13 (6.6%) were married.

From the whole sample of 197 participants, 74 (37.6%) could be re-recruited for the second measurement two months later.

### Measures

All measures used in this study are self-report scales, with the PCS-Q serving for a retrospective assessment and the other scales serving for the assessment of the current mental status.

*Parental Caregiving Style Questionnaire (PCS-Q).* The PCS-Q serves for the retrospective assessment of parental

**Table 1** Distribution of parental caregiving styles in two previous studies and the present study

		Neumann (2002)		Neumann & Tress (2007)		Present study			
		<i>Student sample</i>		<i>Clinical sample</i>		<i>Student sample</i>			
						<i>Time 1</i>		<i>Time 2</i>	
		<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Mother	warm/responsive	74	71.2%	38	45.2%	151	77.0%	60	82.2%
	ambivalent/inconsistent	25	24.0%	36	42.9%	41	20.9%	12	16.4%
	cold/rejecting	5	4.8%	10	11.9%	4	2.0%	1	1.4%
	total	104		84		196		73	
Father	warm/responsive	48	47.1%	32	38.1%	90	46.6%	39	52.7%
	ambivalent/inconsistent	41	40.2%	33	39.3%	81	42.0%	26	35.1%
	cold/rejecting	13	12.7%	19	22.6%	22	11.4%	9	12.2%
	total	102		84		193		74	

caregiving (Hazan & Shaver, 1986, published in Collins & Read, 1990). Analogous to the attachment styles secure, anxious and avoidant, Hazan and Shaver (1986) formulated three short paragraphs each describing a specific pattern of parental behavior towards the child:

- “Warm/responsive” is analogous to the secure style and characterizes loving, responsive and supportive parenting.
- “Ambivalent/inconsistent” is analogous to the anxious style and characterizes inconsistent, unpredictable and often inattentive parenting.
- “Cold/rejecting” is analogous to the avoidant style and characterizes cold, distant and dismissive parenting.

Respondents are asked to select the paragraph which best describes their parents’ behavior towards them when they were a child, once with regard to the mother and another time with regard to the father.

The German version of the PCS-Q (PCS-Q-G) is attached in the appendix. The instruction of this version includes the note that respondents can omit the rating of a parent’s caregiving if they hardly knew her or him. This approach was chosen because the measurement should relate to the perceived quality of parental caregiving and not to childhood adversities due to loss of a parent through death or lack of contact following parental divorce.

*Rosenberg Self-Esteem Scale (RSES).* The RSES serves for the measurement of self-esteem (Rosenberg, 1965, German version Collani & Herzberg, 2003). The ten items with statements about the self (e.g. “On the whole, I am satisfied with myself”) are rated on a 4-point Likert scale from 1 (strongly disagree) to 4 (strongly agree).

*Relationship Assessment Scale (RAS).* The RAS serves for the measurement of satisfaction with the romantic relationship (Hendrick et al., 1988, German version Hassebrauck, 1991). Several aspects of the relationship are assessed with seven items (e.g. “How good is your relationship compared to most?”) ranging from 1 (low satisfaction) to 7 (high satisfaction). To enable singles to fill out this questionnaire, in this study the instruction included the note that participants who currently have no romantic partner should recall their most recent relationship.

*Satisfaction with Life Scale (SWLS).* General life satisfaction was measured with the SWLS (Diener et al., 1985, German version Glaesmer et al., 2011). The five items (e.g. “In most ways my life is close to my ideal”) are answered on a 7-point Likert scale from 1 (strongly disagree) to 7 (strongly agree).

*Patient Health Questionnaire Depressive Symptom Severity Scale (PHQ-9).* The PHQ-9 is a module from the Patient Health Questionnaire (Kroenke et al., 2001, German

version Löwe et al., 2002). The nine items (e.g. “Feeling down, depressed, or hopeless”) describe the diagnostic criteria of a major depressive disorder. Respondents are asked to rate the frequency of these symptoms on a 4-point Likert scale from 0 (not at all) to 3 (nearly every day).

*Generalized Anxiety Disorder 7-Item Scale (GAD-7).* The GAD-7 is another module derived from the Patient Health Questionnaire (Spitzer et al., 2006, German version Löwe et al., 2002). The seven items (e.g. “Feeling nervous, anxious or on edge”) describe the criteria of a generalized anxiety disorder and have the same answer format as the PHQ-9.

## Data analysis

The analyses comprised three steps. First, the reliability of all scales used in this study was controlled. For the five continuous scales, RSES, RAS, SWLS, PHQ-9 and GAD-7, the internal consistency was assessed by calculating Cronbach’s alpha. The test-retest reliability of the PCS-Q-G was assessed by calculating the percent match and the kappa coefficient for the classifications at Time 1 and Time 2, once with regard to maternal caregiving style and another time with regard to paternal caregiving style.

Second, the distributions of maternal and paternal caregiving styles were reported. Differences in the frequencies of the three styles between the two parents were tested with a chi-square test.

Third, the main hypotheses related to associations of parental caregiving with variables of psychological well-being and mental health were tested. Univariate analyses of variance were performed to test whether these variables differ depending on the chosen style of parental caregiving, separately for maternal and paternal caregiving. The partial eta squared was calculated as an indicator of effect size.

## Results

### Scale reliability

The continuous scales used in this study all showed a high internal consistency. Cronbach’s alpha for the five measures were as follows: RSES:  $\alpha=0.91$ , RAS:  $\alpha=0.91$ , SWLS:  $\alpha=0.90$ , PHQ-9:  $\alpha=0.85$ , GAD-7:  $\alpha=0.87$ .

The agreement between the classifications of parental caregiving at the two measurement times was high. Regarding maternal caregiving, 73 participants classified the style at both times of measurement, of whom 66 (90.4%) selected the same category at Time 1 and Time 2. The kappa coefficient ( $\kappa=0.66$ ,  $p<.001$ ) indicated a substantial agreement (Koch et al., 1977).

A similar result was obtained for paternal caregiving. Here, 72 participants classified the style at both times of measurement, of whom 62 (86.1%) selected the same category at Time 1 and Time 2. The kappa-coefficient ( $\kappa = 0.76$ ,  $p < .001$ ) again indicated a substantial agreement.

### Distribution of caregiving styles

The distributions of PCS-Q-G classifications obtained in this study are shown on the right in Table 1. At both times of measurement, maternal caregiving was most frequently classified as warm/responsive, while classifications as cold/rejecting were rare. Paternal caregiving was classified as warm/responsive in about half of the cases, and for the other half of the classifications, ambivalent/inconsistent was selected more frequently than cold/rejecting.

The frequencies of the three styles thus differed in maternal and paternal caregiving, with the mother's caregiving being classified more often as warm/responsive and less often as cold/rejecting. A chi-square test showed that these differences are significant at Time 1 ( $X^2(4, 192) = 13.82$ ,  $p = .008$ ). For Time 2, a chi-square test was not conducted, because two cells had a value of 0 in the contingency table.

### Differences in adult mental state depending on parental caregiving style

Tables 2 and 3 show differences in the variables of psychological well-being and mental health in the three groups of

parental caregiving. The results were similar for maternal and paternal caregiving.

Self-esteem, life satisfaction, depression and anxiety differed significantly in the three groups. The effect sizes were medium, as indicated by partial eta squared ( $\eta^2$ ). Recollections of warm/responsive parental caregiving came along with the highest scores for self-esteem and life satisfaction and the lowest scores for depression and anxiety. Recollections of cold/rejecting caregiving showed the reversed pattern of results, i.e., the lowest scores for self-esteem and life satisfaction and the highest scores for depression and anxiety. The group who remembered ambivalent/inconsistent caregiving was always in the middle.

Relationship satisfaction, however, differed only slightly in the three groups. Although the difference between the three groups of paternal caregiving style became significant, the effects of both maternal and paternal caregiving style on relationship satisfaction were only small, as indicated by partial eta squared.

### Discussion

The aim of the present study was to relate recollections of parental caregiving in childhood to adult psychological well-being and mental health. The measure used for the assessment of parental caregiving, the PCS-Q, allows classifying parental caregiving as warm/responsive, ambivalent/inconsistent and cold/rejecting, analogous to the three-category model of attachment.

**Table 2** Self-esteem, satisfaction and mental health depending on maternal caregiving style

	Maternal caregiving style	<i>n</i>	<i>M</i>	<i>SD</i>	<i>F</i> (2,193)	<i>p</i>	$\eta^2$
Self-esteem	warm/responsive	151	3.34	.60	5.29	.006	.05
	ambivalent/inconsistent	41	3.02	.70			
	cold/rejecting	4	2.75	1.22			
Relationship satisfaction	warm/responsive	151	5.70	1.03	1.68	.189	.02
	ambivalent/inconsistent	41	5.57	1.12			
	cold/rejecting	4	4.75	2.12			
Life satisfaction	warm/responsive	151	27.73	5.89	5.20	.006	.05
	ambivalent/inconsistent	41	24.59	7.05			
	cold/rejecting	4	22.75	4.57			
Depression	warm/responsive	151	6.07	4.63	6.62	.002	.06
	ambivalent/inconsistent	41	8.88	5.14			
	cold/rejecting	4	10.75	11.09			
Anxiety	warm/responsive	151	5.30	4.21	8.06	< .001	.08
	ambivalent/inconsistent	41	7.98	4.84			
	cold/rejecting	4	10.50	7.77			



**Table 3** Self-esteem, satisfaction and mental health depending on paternal caregiving style

	<i>Paternal caregiving style</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>F</i> (2,190)	<i>p</i>	$\eta^2$
Self-esteem					7.33	.001	.07
	warm/responsive	90	3.42	.52			
	ambivalent/inconsistent	81	3.16	.69			
Relationship satisfaction	cold/rejecting	22	2.90	.84	3.46	.033	.04
	warm/responsive	90	5.82	.92			
	ambivalent/inconsistent	81	5.60	1.15			
Life satisfaction	cold/rejecting	22	5.17	1.33	7.76	.001	.08
	warm/responsive	90	28.64	5.15			
	ambivalent/inconsistent	81	26.01	6.42			
Depression	cold/rejecting	22	23.68	7.75	9.32	< .001	.09
	warm/responsive	90	5.41	4.16			
	ambivalent/inconsistent	81	7.36	5.43			
Anxiety	cold/rejecting	22	10.14	5.48	7.46	.001	.07
	warm/responsive	90	4.92	4.13			
	ambivalent/inconsistent	81	6.38	4.53			
	cold/rejecting	22	8.86	5.43			

The German version of the PCS-Q proved to have a good retest-reliability in this study. A repeated measurement with an interval of two months showed that most respondents chose the same category for the description of parental caregiving at the two times, a finding that both applied to maternal and paternal caregiving.

The distributions of caregiving styles in the student sample of this study revealed differences between recollections of maternal and paternal caregiving. Assessments of the mother's caregiving were mostly positive, indicated by the high number of classifications as warm/responsive and the low number of classifications as cold/rejecting. In contrast, assessments of the father's caregiving were less often positive. Classifications as ambivalent/inconsistent and cold/rejecting were chosen more frequently here, showing that a substantial number of participants remembered insensitive and inadequate paternal caregiving.

The frequencies of caregiving styles observed in this study are similar to the frequencies in the study by Neumann (2002), which also has a student sample. The accordance with this previous study confirms that participants from non-clinical samples predominantly remember positive experiences with their parents in childhood, especially with regard to the mother. In contrast, most of the patients who participated in the clinical trial by Neumann and Tress (2007) recollected negative experiences with both parents. The PCS-Q-G thus proves to be an instrument that can detect differences between clinical and non-clinical samples in recollections of parental caregiving.

The main hypotheses of this study were largely confirmed. The scales for the measurement of adult psychological

well-being and mental health differed significantly depending on the parental caregiving style, with only one exception. Given that the three styles, ranging from warm/responsive to cold/rejecting, indicate a decreasing quality of parental caregiving, the results show that the lower the quality, the lower the scores for self-esteem and life satisfaction and the higher the scores for depression and anxiety. This pattern of results was found for maternal and paternal caregiving, suggesting that both parents have an impact on a child's later emotional development.

The only exception occurred with regard to relationship satisfaction. This variable differed only slightly in the three groups of both maternal and paternal caregiving, with small effect sizes. A similar result was found in the study by Neumann (2002), in which parental caregiving turned out not to be associated with the two dimensions of adult romantic attachment. The concordance in the two studies suggests that the impact of early parenting on attitudes towards romantic relationships in later life is rather weak.

Overall, the findings largely support assumptions of attachment theory. Provided that recollections of parental caregiving reflect real experiences, this study found evidence for an impact of early parenting on adult psychological well-being and mental health. However, with regard to romantic relationships there was no clear evidence of such an impact, a result that does not correspond to assumptions of attachment theory.

## Limitations

This study was conducted at a German university with a sample consisting mainly of students. The two comparison samples listed in Table 1 also come from studies conducted in Germany. The cultural context of these studies is therefore very similar. The question of how far the findings also apply to other cultural contexts, especially non-Western societies, is therefore still open.

All data of this study come from self-report measures. Further studies are needed to clarify whether the findings can be confirmed when using another methodological approach, for example measurement of biological parameters.

Furthermore, parental caregiving was measured retrospectively. The validity of retrospective measures is an issue of concern and has been widely discussed. Hardt and Rutter (2004) reviewed studies on this topic and concluded that recollections of childhood, of course, do not fully correspond to actual experiences. Such reports, however, proved to be sufficiently valid to justify their use in empirical research.

A factor that could limit the scope of the PCS-Q-G is that this measure led to unequal group sizes, especially with regard to maternal caregiving styles. The number of classifications as cold/rejecting, in particular, was very small here. Therefore, it is possible that in studies with small samples sizes the group of classifications as cold/rejecting becomes even smaller, making statistical testing difficult. The use of the PCS-Q-G in empirical studies is therefore only recommended in larger samples from the normal population or in clinical samples where classifications of maternal caregiving as cold/rejecting are more common.

## Conclusions

The present study showed that recollections of early parenting are associated with psychological well-being and mental health in adult life. Solely satisfaction with the romantic relationship turned out to be rather independent of these recollections. Since there is evidence that retrospective measures reflect actual experiences reasonably well, the findings of this study largely support assumptions of attachment theory, according to which the quality of early parenting has an impact on psychological well-being in later life.

With the PCS-Q-G, an instrument for the retrospective assessment of parental caregiving is presented that is economic, proved to be reliable and has face validity. Since there are already established instruments for the assessment of parental caregiving, the question arises as to whether the PCS-Q-G is useful as another instrument for this purpose. Indeed, the PCS-Q-G may offer utility in trials and clinical contexts. This measure is preferable if parental caregiving

should be assessed in analogy to attachment styles, thus allowing, inter alia, direct comparisons between caregiving and attachment styles. Moreover, the PCS-Q is a very short instrument and can therefore be useful when the measurement should not be long and a quick result is needed. One area of application can be screenings for psychotherapy treatments. Using the PCS-Q-G offers therapists the opportunity to quickly get a first impression of the quality of attachment bonds with parents in childhood. Classifications as ambivalent/inconsistent and cold/rejecting point to problem areas that should be explored more closely and treated in the therapy. Since psychodynamic psychotherapy focuses on close relationships in childhood and adulthood, the PCS-Q-G can be particularly useful in therapies based on this approach.

## Appendix: Parental Caregiving Style Questionnaire – Deutsche Version (PCS-Q-G)

**Instruktion:** Im Folgenden finden Sie eine Reihe von Aussagen, die das Verhalten von Eltern gegenüber ihren Kindern beschreiben. Bitte wählen Sie für Ihre Mutter und Ihren Vater jeweils die Aussage aus, die das Verhalten des Elternteils Ihnen gegenüber in Ihrer Kindheit am besten beschreibt. Markieren Sie bitte nur eine Aussage pro Elternteil. Wenn Sie ein Elternteil gar nicht oder kaum kannten, können Sie den Abschnitt, der sich darauf bezieht, freilassen.

### Meine Mutter

- Sie war im Allgemeinen liebevoll und aufmerksam; sie wusste ziemlich genau, wann ich Hilfe brauchte und wann sie mich selbständig etwas machen lassen konnte; unsere Beziehung war meistens gut, und im Großen und Ganzen kann ich mich nicht darüber beschweren.
- Sie war ziemlich unbeständig in ihren Reaktionen auf mich, manchmal liebevoll und manchmal nicht; sie war mit eigenen Dingen beschäftigt, so dass sie meine Bedürfnisse manchmal nicht wahrnahm oder nicht darauf einging; sie hat mich bestimmt geliebt, aber sie zeigte es nicht immer in angemessener Weise.
- Sie war ziemlich kalt und distanziert oder abweisend oder nicht sehr aufmerksam; ich war nicht das Wichtigste in ihrem Leben; sie war mit ihren Gedanken häufig woanders; es ist möglich, dass sie mich lieber nicht gehabt hätte.



## Mein Vater

- Er war im Allgemeinen liebevoll und aufmerksam; er wusste ziemlich genau, wann ich Hilfe brauchte und wann er mich selbständig etwas machen lassen konnte; unsere Beziehung war meistens gut, und im Großen und Ganzen kann ich mich nicht darüber beschweren.
- Er war ziemlich unbeständig in seinen Reaktionen auf mich, manchmal liebevoll und manchmal nicht; er war mit eigenen Dingen beschäftigt, so dass er meine Bedürfnisse manchmal nicht wahrnahm oder nicht darauf einging; er hat mich bestimmt geliebt, aber er zeigte es nicht immer in angemessener Weise.
- Er war ziemlich kalt und distanziert oder abweisend oder nicht sehr aufmerksam; ich war nicht das Wichtigste in seinem Leben; er war mit seinen Gedanken häufig woanders; es ist möglich, dass er mich lieber nicht gehabt hätte.

**Author Contribution** Both authors contributed to the study conception and design. Material preparation and data collection were performed by E.R. Data analyses were conducted by E.N. The first draft of the manuscript was written by E.N. E.R. reviewed and revised the paper. Both authors read and approved the final manuscript.

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**Data Availability** The datasets generated and analyzed during the current study are available from the corresponding author on reasonable request.

## Declarations

**Conflict of interest** On behalf of all authors, the corresponding author states that there is no conflict of interest.

**Ethics approval** All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

**Informed consent** Informed consent was obtained from all individual respondents included in this study.

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