The relation between attachment and intergenerational support

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Abstract This study investigated the relation between the internal representation of attachment and the perception of the actual exchange of intergenerational support within 100 dyads of adult daughters and their elderly mothers in Germany. Results showed relations between the daughters' preoccupation and avoidance with their perception of receiving emotional support from their parents and providing instrumental support to them. No relations were found between the mothers' attachment and the support they provided to the daughters. These results are discussed with respect to different conditions for emotional and instrumental support of adult daughters and their elderly mothers, and a relationship specific approach to attachment.

Introduction

Over the past two decades, attachment research, which traditionally focused on childhood development, has emphasized the importance of attachment in adulthood (Grossmann et al. 2005). Early experiences with attachment figures and later experiences with significant others form an internal representation of the self and of others in the social context (Bowlby 1969). The internal working model continues to influence social relationships in adulthood (Hazan and Shaver 1987). The quality of communication and support are both important aspects of social relationships. The present study analyzes possible relations between attachment and support in middle-aged daughters and their mothers, a so far understudied intergenerational relationship (Trommsdorff 2005a, in press), by considering the perspective of both mother and daughter.

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Intergenerational exchange of support

The exchange of support remains important in the parent–child relationship throughout life. Representative studies underline the large amount of support that is exchanged between parents and adult children (for Germany: Kohli et al. 2000). However, different types of support need to be differentiated since they imply different motivations to help and different behaviors (investment) (e.g., Cunningham and Barbee 2000). While financial support more often flows from parents to their children than vice versa (Spitze and Logan 1992), instrumental (e.g., household tasks) and emotional support (e.g., providing comfort) from adult children more often equals or exceeds that of parents (Kohli et al. 2000; Rossi and Rossi 1990).

According to the model of intergenerational solidarity by Bengtson and colleagues (e.g., Bengtson and Roberts 1991), providing support is, among other factors, influenced by family obligations and the affective quality of the parent–child relationship. There is rich evidence for the importance of family obligations in providing support and for a positive association between the affective qualities of the relationship, such as closeness, warmth, and positive evaluation of the other person (admiration), and the exchange, that is receiving and providing support (e.g., Ikking et al. 1999; Rossi and Rossi 1990; Schwarz et al. 2005; Silverstein et al. 1995). However, given the life-long ties between parents and children, earlier experiences within the parent–child relationship presumably are relevant for the arrangements in adulthood (Cicirelli 1983; see also Rossi and Rossi 1990; Bengtson 1996).

Adult attachment

The concept of attachment, particularly the concept of the internal working model, offers a promising approach to include early experiences with the parents. According to attachment theory, infants' early experiences with

their caregivers influence their attachment style and internal working model. Sensitive, responsive caregiving, where the caregiver is available in times of stress and usually reacts promptly and adequately fosters a secure attachment style. Insensitive reactions on the part of caregivers make it more likely that the child will develop an insecure-ambivalent or insecure-avoidant attachment style (Ainsworth et al. 1978). With further cognitive and social-emotional development, early attachment experiences are internalized and become part of the internal working models of self and of others (Bowlby 1969).

In adolescence, the internal working model becomes more and more stable and trait-like (Bowlby 1969). However, there is also strong emphasis in the literature that the internal working model develops and is activated with reference to a certain relationship (Asendorpf and Wilpers 2000). For attachment styles in adulthood, Bartholomew and Horowitz (1991) suggested four combinations of a positive/negative internal model of self and of others: (a) secure individuals with a positive model of self and others, (b) preoccupied individuals with a negative self model and a positive other model who tend to use others to fulfil their dependency needs, (c) dismissing individuals with a positive self and a negative other model who rather avoid contact with others, and (d) fearful individuals with both negative self and other models. Across the life span, the internal working model guides further experiences with relevant others since it functions like a lens through which social experiences are filtered (Ptacek 1996). Thereby, it influences a person's expectations and behavior in social relationships.

Only a limited amount of research has investigated possible relations between adult attachment and social support. The studies, which are summarized in the following, mainly focused on receiving support and less on providing support. Furthermore, most studies have centered on young adults and their romantic partners, and not on intergenerational relationships in middle adulthood. The aim of the present study was to fill this gap.

Attachment and received support

Most research on the relation between attachment and received social support refers to the *perception of available social support*. Aspects of a secure attachment, including a sense of self worth and feeling accepted, should affect the expectation that others are available and supportive when needed (Sarason et al. 1990). According to the model of social support in stress situations by Bartholomew et al. (1997), the attachment pattern of the person under stress affects his/her appraisal, help seeking behavior, and perceived support. The relation between attachment and perceived support is well documented. Young adults' security is positively related to perceived support from family and friends, while fearful attachment style is negatively related to

perceived support from friends (Asendorpf and Wilpers 2000; Ognibene and Collins 1998). The attachment pattern indirectly influences the enacted support through its effects on help-seeking behavior. Thus, help-seeking behavior is a mediator of the association between attachment and the support an individual receives (Bartholomew et al. 1997). Hypotheses derived from the model were that security and preoccupation are positively associated with help seeking behaviors, and that avoidance is negatively associated. Positive relations between secure and preoccupied attachment styles and help seeking were found by Ognibene and Collins (1998).

One important strategy in help seeking is self-disclosure (Bartholomew et al. 1997) which will be investigated in the present study. By communicating about own internal processes, the individual can signal the need for support and offer information about adequate means of support to the potential providers. In a review of studies on the relation between attachment and self-disclosure, Feeney et al. (2000) concluded that secure and preoccupied individuals generally show a high level of and ability for self-disclosure while avoidant individuals are low on both. However, preoccupied, in contrast to secure individuals, use self-disclosure less flexibly and provide fewer opportunities to others to express their feelings and needs. In a study with undergraduates, self-disclosure in romantic relationships explained partially the negative effect of avoidance on the perceived emotional support (Anders and Tucker 2000). Florian (1995) found among undergraduates main effects of their attachment on perceived available support and their search for support: secure individuals were higher on both as compared to avoidant and ambivalent individuals, regardless of the kind of support or the provider of support.

Attachment and providing support

Compared to studies on the relation between attachment and perceived support, much less work has been done on the relation between attachment patterns and providing support. First, we ask why adult children give support to their aging parents. According to Cicirelli (1991), and in line with the theoretical basis of attachment theory, children tend to protect their attachment figures when they are endangered. Even for adult children, parents are a primary source of support in times of stress. When the caretaking and attachment resources of aging parents are at risk (e.g., due to their needing help) adult children provide help in order to maintain their parents as a resource. Beside this egoistic motive for help, normative (filial obligations) and altruistic motives can influence providing help (Trommsdorff, 2005b, in press).

Empirical studies have indicated that middle-aged children's feelings of attachment were directly associated with their feelings of preparedness for future caregiving of parents (Sörensen et al. 2002) and with their commitment to help their parents in the future, while the

relation to present support was mediated by the adult children's frequency of contact (Cicirelli 1983). Middle-aged daughters' secure attachment to their elderly mothers (as well as their feelings of obligation) were positively associated with the time the daughters invested in instrumental support for their mothers (Cicirelli 1993). Adult daughters' secure and anxious attachments were more strongly associated with emotional support than with instrumental support for their institutionalized mothers (Carpenter 2001). Furthermore, secure attachment seems to be a protection against caregiving burden (Carpenter 2001; Crispi et al. 1997).

With respect to parents as providers of support, we suppose that the behavioral system of caregiving is activated when a child is in need for support, even when the child is grown-up (George and Solomon 1999). The behavioral systems of attachment and of caregiving are separated but closely linked (Bowlby 1969; George and Solomon 1999). With respect to young children, there is some evidence for the relation between attachment of the caregiver and the quality of care. Insecure parents offered less comfort to their children in a painful medical procedure as compared to secure parents (Goodman et al. 1997). Parental avoidance seems to be negatively associated with their support for the child in a teaching task (Rholes et al. 1995), and additionally, highly avoidant parents were less responsive when their children showed high distress in an inoculation procedure, while parents low in avoidance increased their responsiveness when their children were distressed (Edelstein et al. 2004). Since attachment plays also an important role for older adults (Bradley and Cafferty 2001), the present study goes beyond existing research by investigating the relation between parents' attachment and support given to their adult children.

Additionally, there are reasons to expect that in general, attachment is related to support provided in close relationships. There is strong evidence that attachment is related to various aspects of social competence (Coble et al. 1996). With respect to young adults, individuals with an avoidant attachment style are less sensitive to their romantic partners' needs (Collins and Read 1990) and they show low rates of caretaking in social relationships (Bartholomew and Horowitz 1991). Preoccupied individuals tend toward overprotection in their helping behavior (Bartholomew and Horowitz 1991). Also, attachment security is positively associated with empathy and social responsibility (Diehl et al. 1998)—two important prerequisites for providing help.

Research questions and hypotheses

Based on this review the aim of the present study was to investigate the association between attachment and the exchange of support between adult daughters and their mothers from both the daughters' and their mothers' perspectives. With respect to received support, we hypothesized a positive association between preoccupied attachment and received support, and a negative association between avoidant attachment and received support for both mothers and their daughters. According to the model of social support process by Bartholomew et al. (1997), we expected that the higher self-disclosure of preoccupied and the lower self-disclosure of avoidant individuals mediates the relation between attachment and received support. So far, only a few studies have tested these expectations, and it is still an open question as to whether self-disclosure is equally associated with emotional and instrumental support. With respect to provided support, we hypothesized that avoidance is negatively and preoccupation positively associated with the degree of provided support for both adult daughters and their mothers. These associations should hold true above and beyond the effects of valuing family obligations and the relationship quality on social support, factors which are important for intergenerational exchange of support in the model of intergenerational solidarity by Bengtson (Bengtson and Roberts 1991).

Method

Participants

The present study is part of the cross-cultural "Value of Children and Intergenerational Relations" Study (see Trommsdorff and Nauck 2005, in press). A convenient sampling method was used. The adult daughters were recruited through residents' registration offices from three different cities in Germany: Chemnitz, Essen, and Constance. The mothers were contacted after receiving their addresses from the daughters. This procedure did not induce a bias in the sample with respect to including dyads with a higher quality in their relationships. Comparisons between this sample and a sample consisting of adult daughters whose mothers did not participate showed that the intimacy and admiration in the relationship with the mother did not differ. For practical reasons, only those mother-dyads were recruited who were within reach for the interviewers. This resulted in a residential proximity of mothers and daughters. The following analyses refer to a sample of $n = 100$ adult mother-daughter-dyads. The standardized face-to-face interviews were carried out by trained female interviewers individually for each person in her home. A small gift was presented at the end of the interview.

The mean age of the daughters was 43.06 years $(SD = 4.55)$ and that of the mothers was 69.60 years $(SD = 5.90)$. The majority of the daughters were married (90%), 7% were remarried, and 3% were cohabiting. The family status of the mothers was: 51% married, 39% widowed, 7% divorced, 3% remarried. All daughters completed secondary school, 11% on the lowest school track, 45% on the middle school track, and 44% on a college bound track. Among the mothers, 3% did not complete secondary school, 70% completed

the lowest school track, 20% the middle school track, and 7% the highest school track. Most of the daughters worked part-time (50%), 30% full-time, and 20% did not have a paid job. The respective numbers for mothers were 8% part-time, 5% full-time, and 87% without a paid job.

According to the reports of the daughters, there was frequent contact (personal or by phone and mail) with their mothers: 76% had contact with their mothers at least several times a week, and only 2% had contact less than once a month with their mothers. Two percent lived in the same household with the mother and 54% of the mothers lived not more than 15 min away from their daughters.

Measures

Attachment (generalized internal representation of attachment) of mothers and daughters was assessed with the Adult Attachment Scale (AAS; Collins and Read 1990). The women rated the 18 items on a five-point rating scale (1 = "strongly disagree," 5 = "strongly agree"). The authors suggested grouping participants into the three attachment styles by performing cluster and discriminant analyses across the three subscales of the AAS (Collins and Read 1990). In order to indicate the appropriate number of clusters, we followed the suggestions by Wiedenbeck and Züll (2001) and first conducted hierarchical cluster analyses across the three subscales of the AAS, choosing Ward's method. The analyses for mothers' and daughters' attachment revealed two clusters each. In a second step, we used K-means cluster analyses to improve the classification of the mothers and daughters into the two clusters. These non-hierarchical analyses showed comparable results for mothers and daughters. The first cluster contained participants who were high in dependence and closeness and low in anxiety, while the second cluster contained participants with the opposite pattern. Additionally, the subscales closeness and dependence were highly correlated ($r = 0.54$ for mothers and daughters). Thus, we make use of the dimensional approach of measuring attachment. In accordance with the literature (see Griffin and Bartholomew 1994), two dimensions were identified. First, avoidance, as a combination of the dependence and closeness scales (most of the items of dependence and closeness were formulated in terms of avoidance), Second, following the descriptions of the four attachment styles by Bartholomew and Horowitz (1991), the items of the original anxiety scale refer to a specific kind of anxious attachment: preoccupation. Thus, depending on the wording of the items and in line with the research the two attachment dimensions refer to negativity of the model of self and the model of others. The internal consistencies of the two scales were satisfying after deleting one item from the avoidance scale (avoidance, 11 items: daughters' $\alpha = 0.81$, mothers' $\alpha = 0.70$; preoccupation, six items: daughters' and mothers' $\alpha = 0.63$).

Daughters reported the extent of their self-disclosure on the subscale Intimacy of the Network of Relationship Inventory (NRI; Furman and Buhrmester 1985) (e.g., "How often do you tell your mother everything that is on your mind?"; three items; $\alpha = 0.80$ for daughters). This scale was used in regressions to predict daughters' perception of receiving support from parents. This indicator shows some overlap with the emotional support measure. However, here the focus is on the intention to talk about one's worries while emotional support refers to the intention to give and take comfort.

Relationship quality plays an important role for the provision of support in Bengtson's model of intergenerational solidarity; as an indicator of this concept the subscale Admiration of the NRI was included in the respective regression analyses for mothers and daughters (e.g., "How often does your daughter/mother let you know that you are good at many things?"; three items; $\alpha = 0.71$ for mothers; $\alpha = 0.78$ for daughters). This was the only NRI-indicator available in this study for measuring relationship quality. The respondents rated the items of both subscales, self-disclosure and admiration, on a five-point scale (1 = "never" to 5 = "always").

Social support between adult daughters and their mothers

Daughters were asked about actual support given to parents[1] as well as actual support received from parents in the last 12 months. From the perspective of the mother, only actual support given to the daughter was assessed. Two kinds of support were measured: emotional and instrumental support. The three items of the indicator of emotional support comprised giving and receiving advice, comfort, and talking about worries. All items were rated on a five-point scale (1 = "never" to 5 = "always"). The scale of instrumental support consisted of three items which referred to giving and receiving household chores, help with official business (only daughters) and care in times of illness. Thus, the measurements refer to the perception of actual received and provided support and are less comparable with instruments assessing perceived available support.

Internal consistencies were moderately high for instrumental and emotional support given to parents ($\alpha = 0.76$ and $\alpha = 0.78$), emotional support given to daughter ($\alpha = 0.76$), and emotional support received from parents ($\alpha = 0.77$), but were not satisfying for instrumental support received from parents ($\alpha = 0.48$) and instrumental support given to daughter ($r = 0.35$).

Two variables were included as control variables: distance between daughter's and mother's residence, and mother's age. It was expected that residential distance (measured on a scale from 1 = "in your home" to 6 = "abroad") affects at least the provision of instrumental support, while mothers' age was used as a proxy for mothers' need of support. For analyses predicting

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[1] Support provided by the daughter was not assessed separately for father and mother

given support a third control variable was used: interdependence that was an indicator of family obligations (five items, example: "It is important to me to respect decisions made by my family."). Interdependence was positively related to the provision of support in previous studies (Schwarz et al. 2005).

Results

Relation between attachment and the support daughters received

Only the daughters reported on the support they received. Hierarchical regression analyses were conducted to test the conditions for the daughters' reports on the actually received support from parents. In the first step, the control variables and the two indicators of attachment were included. In the second step, the degree of self-disclosure the daughters showed in the relationship with their mother was introduced in order to examine its meditating effect on the relation between attachment and received support (Baron and Kenny 1986). The results are summarized in Table 1.

Daughters with lower avoidance and higher preoccupation received emotional support from parents more often. As indicated in step 2 of the analysis, these relations were substantially reduced after self-disclosure was introduced. Since self-disclosure was not correlated with avoidance ($r=0.02$) but with preoccupation ($r=0.33$, $p<0.01$), the mediating effect refers only to the second indicator of attachment. The higher the daughters' preoccupied attachment, the more self-disclosure they displayed in their relationships with their mother. This finding explains in part why these daughters received more emotional support from their parents. However, with respect to instrumental support, no significant associations were found between attachment and support or between self-disclosure and support. Thus, our expectation was only confirmed for emotional support.

Relation between attachment and the support provided by daughters and mothers

To predict social support provided by daughters to their parents and by mothers to their daughters, again hierarchical regression analyses were conducted. Here, an additional control variable was included, the value of interdependence of the provider of support. Since the exchange of support within families is usually affected by family norms and values, we expected that the analyses would reveal the effects of attachment above and beyond those normative aspects. In Bengtson's model of intergenerational solidarity (Bengtson and Roberts 1991) as well as in Bartholomew's model of the social support process (Bartholomew et al. 1997), relationship quality plays an important role in whether dyadic partners provide

support to each other. Thus, admiration of the recipient of support perceived by the provider was included in the second step of the analyses.

Daughter's perspective: The results for the daughters are summarized in Table 2. As expected and already shown for a larger sample of the "Value of Children" Study (Schwarz et al. 2005), interdependence was positively related to the provision of emotional and instrumental support. However, daughter's attachment was only related to the provision of instrumental support. The less avoidant and the more preoccupied the daughters were attached, the more instrumental support they provided to their parents. Daughter's perception of admiration from the mother was not related to providing support.

Mother's perspective: For the mothers, neither interdependence (emotional support: $\beta=0.15$; instrumental support: $\beta=-0.01$) nor their attachment (emotional support: avoidance $\beta=0.11$, anxiety $\beta=0.00$; instrumental support: avoidance $\beta=0.01$, anxiety $\beta=0.19$) were associated with the support they gave to their daughters. However, their perception of admiration from the daughter was positively related to the amount of the emotional and instrumental support they provided to their daughters (emotional support: $\beta=0.37$. $p<0.01$; instrumental support: $\beta=0.26$, $p<0.05$). Thus, our expectation with respect to the relation between attachment and providing support was only confirmed for the instrumental support the daughters were giving.

Discussion

This study showed that adult daughters' attachment plays a role in their perception of actually giving and receiving support in their relationships with their elderly parents. However, emotional and instrumental support should be differentiated. With regard to daughters' emotional support received from parents, avoidance was negatively, and preoccupation was positively related. Self-disclosure partially mediated the relation between preoccupation and emotional support. With respect to instrumental support the daughters provided to their parents, again avoidance was negatively and preoccupation positively related. Thus, contrary to the model of Bartholomew et al. (1997) attachment is also connected with providing support. The significant associations between attachment and support were in the expected directions. Mothers' attachment was not related to any of the support they gave to their daughters.

One explanation for the association between daughters' attachment and receiving emotional (but not receiving instrumental) support might be that the likelihood of getting instrumental support is not closely related to one's communication competency and self-disclosure tendencies (see the small effect of intimacy on instrumental support). The need for instrumental sup-

Table 1 Summary of hierarchical regression analyses to predict received social support as perceived by daughters

	Emotional support		Instrumental support	
	Step 1, β	Step 2, β	Step 1, β	Step 2, β
Mother's age	0.04	0.08	−0.20+	−0.19+
Residential distance	−0.05	0.03	−0.38**	−0.35**
Daughters' avoidance	−0.24*	−0.16	−0.12	−0.10
Daughters' preoccupation	0.36**	0.22+	0.13	0.08
Daughters' self-disclosure		0.32**		0.10
ΔR^2	0.10**	0.09**	0.14**	0.00

$+ p < 0.10$; $*p < 0.05$; $**p < 0.01$

Table 2 Summary of hierarchical regression analyses to predict provided emotional and instrumental support as perceived by daughters

	Emotional support		Instrumental support	
	Step 1, β	Step 2, β	Step 1, β	Step 2, β
Mother's age	0.06	0.06	0.30**	0.31**
Residential distance	0.08	0.09	−0.26**	−0.25*
Daughters' interdependence	0.22*	0.22*	0.21*	0.21*
Daughters' avoidance	−0.09	−0.06	−0.24*	−0.21+
Daughters' preoccupation	0.16	0.15	0.27*	0.25*
Daughters' perceived admiration from mothers		0.08		0.09
ΔR^2	0.09*	0.01	0.33**	0.01

$+ p < 0.10$; $*p < 0.05$; $**p < 0.01$;

port is more evident to potential providers of support (e.g., in case of obvious illness, work overload etc.) while the need for comfort and affection must be communicated in order to make the potential provider of support aware of such need. Here, at least two aspects of interpersonal communication play a role: self-disclosure of the person in need (help seeking communication) as well as empathy of the potential provider of support for the other person's needs. Both aspects of communication require a certain social competency of both partners, which is affected by attachment (e.g., for self-disclosure see Anders and Tucker 2000; Feeney et al. 2000).

In fact, self-disclosure served as a mediator of the association between preoccupation and received emotional support. Even though there is some overlap between the measures of self-disclosure and emotional support (both refer to comfort and talking about private feelings) this result is not redundant. While self-disclosure refers to the *daughters' willingness* to talk openly about their feelings with their mothers, emotional support refers to the daughters' perception of *parents' willingness* to provide comfort and to talk about the daughters' worries. Thus, characteristics of the daughters on the one hand and of the parents on the other hand should influence the two dimensions.

For providing support, the pattern of relations was different. Here attachment was only related to instrumental support. Against the background of results from other studies, the negative association between avoidance and provided instrumental support can be explained by the lower sensitivity for the needs of other persons of individuals with an avoidant attachment

style. Additionally, their tendency to keep aloof from others makes it more difficult for them to care for others (Bartholomew and Horowitz 1991; Collins and Read 1990). The positive relation between preoccupation and instrumental support can be explained by the tendency of preoccupied individuals to show overprotection, particularly giving more than is needed, as was shown by Bartholomew and Horowitz (1991).

However, the reduced ability of preoccupied individuals to be open to others' self-disclosure (Feeney et al. 2000) and the stronger egoistic motives for support of dependent adult children (Lang and Schütze 2002) might conflict with the requirements of emotional support, which comprise high levels of empathy to others' needs and also altruism of the provider. Therefore, preoccupation does not show a positive relation with emotional support. An interesting question for future research is whether support given by preoccupied individuals is as positive for the well-being of the recipient as support given by a securely attached individual.

The present study only found associations between daughters' attachment and support. Does this mean that mothers' attachment is not important for intergenerational exchange of support, or that the attachment of elderly persons is less relevant for their supporting behavior as compared to younger adults? Our study could not test the association between attachment and received support of the mothers. Thus, we cannot conclude that there are no associations between mothers' attachment and support at all. Wensauer (1995) for instance, found that elderly people with a secure attachment style were more integrated in a social network and

used the network resources more effectively than did individuals with an insecure attachment.

We suggest a relationship specific perspective toward our results assuming that this may help to clarify their meaning. The internal working models of the daughters are largely based on the experiences with the mothers; thus stronger associations with behavior in the relationship with the mother could be expected. In contrast, mothers' internal working models are only marginally affected by experiences with the daughters. This might explain the weak associations between mothers' representations of attachment and their behavior toward their daughters. However, mother's relationship with her daughter is important as indicated by the significant effect of mothers' perceived admiration from the daughter on providing emotional and instrumental support. In sum, the results offer a better prediction of support when relationship specific aspects are considered. This is in line with empirical results for young adults by Asendorpf and Wilpers (2000) who found close associations between attachment and available support within but not across relationships.

One of the caveats of the study is that our data are correlational in nature, and unfortunately, no data are available on the mothers' perception of support from their daughters. Additionally, a larger sample size would allow for forming groups of the four attachment styles for more differentiated analyses. Nevertheless, the study highlights the importance of adult attachment style in intergenerational relationships, at least for middle-aged daughters. The results underline the importance of attachment and relationship quality as relevant conditions for support in parent–child relationships over the life span.

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