REPORT:

Longitudinal Changes in Emerging Adults’ Attachment Preferences for their Mother, Father, Friends, and Romantic Partner: Focusing on the Start and End of Romantic Relationships
Abstract

Only few studies have longitudinally explored to whom emerging adults prefer to turn to seek closeness, comfort, and security (called “attachment preferences”), and previous studies on attachment preferences in emerging adults have focused only on the beginning of romantic relationships but not on the end of relationships. Czech emerging adults ($M=21.47; SD=1.48$) completed the questionnaire of attachment preferences at 2 time points, Wave 1 (Summer 2013) and Wave 2 (Summer 2014). Latent difference score analyses revealed that emerging adults who were not in a romantic relationship in Wave 1 but started a romantic relationship between the two waves ($n=97$) and those who had a romantic partner in both waves ($n=379$) were both more likely to increase their attachment preference for the romantic partner and decrease their preference for friends, whereas those who did not start a relationship ($n=185$) were not. Emerging adults who were in a romantic relationship in Wave 1 but were not in Wave 2 ($n=69$) decreased their preference for the partner and increased their preference for friends. In all the groups, attachment preferences for the mother, for the father or for the family did not change. Multiple regression analyses further revealed that for those who had a romantic partner in both waves, their length of romantic relationship was associated with changes in attachment preferences for romantic partners and for friends.

Keywords: Attachment hierarchy; attachment preference; emerging adulthood; parent-child relationships; peer relationships; romantic relationships.
Children develop attachment (i.e., enduring affectional bonds from which they receive comfort and protection; Ainsworth, 1989) to multiple individuals – termed attachment figures. To seek closeness, comfort, and security, children hierarchically prefer to turn to a particular attachment figure rather than other attachment figures (hereafter, referred to as “attachment preferences”; see Hazan & Zeifman, 1994, for details). During infancy and childhood, parents are usually the primary caregivers and the most preferred attachment figures (Umemura, Jacobvitz, Messina, & Hazen, 2013). However, over the course of the development, new attachment figures emerge, in particular friends and later romantic partners. Following adolescence, the romantic partner usually becomes the most preferred figure in the functioning of attachment as well as affiliative, reproductive, and caregiving behavioral systems (Ainsworth, 1989; Furman & Wehner, 1994). During emerging adulthood, which is considered a prolonged exploratory period and a transition period to adulthood (Arnett, 2000), young people also prefer their romantic partner to any other attachment figure (Pitman & Scharfe, 2010).

A series of cross-sectional studies demonstrated that when emerging adults become involved with a romantic partner and their romantic relationship becomes longer, they have a stronger attachment preference for their partner (e.g., Fraley & Davis, 1997; Hazan & Zeifman, 1994; Pitman & Scharfe, 2010). Furthermore, a recent study found that a longer romantic relationship was positively associated with young individuals’ attachment preference for their romantic partner and negatively related to their preference for their friends, while it was not associated with their preferences for their mother or for their father (Rosenthal & Kobak, 2010). Our previous cross-sectional study (CITATION BLINDED FOR REVIEW), which used Wave 1 data from the same dataset as the present study, also revealed the same pattern.
One explanation is that from the developmental standpoint, “romantic relationships begin as an informal extension of friendship groups” (Collins & van Dulmen, 2006, p. 221). For example, during adolescence, the association between attachment security with friends and with romantic partners is more consistent, compared to the one between romantic partners and parents (Furman, Simon, Shaffer, & Bouchey, 2002). These findings suggest that one’s attachment relationships with friends are a mediator of the transition from parents to romantic partners in the course of attachment development to adulthood. However, the literature examining attachment security with parents, friends, and romantic partners in adolescence and emerging adulthood also reported significant associations among attachment security with all these attachment figures (Collins & Madsen, 2006). Hence, romantic attachment seems more strongly related to friend attachment compared to parental attachment, although attachment relationships with different attachment figures are not completely distinct from each other.

**The lack of Longitudinal Evidence on Attachment Preferences**

The biggest limitation of the previous findings on interchanges versus independences of attachment preferences for the romantic partner, friends, and parents is that they relied on cross-sectional research designs. Whereas cross-sectional designs only allow us to understand the association between time and attachment preferences *between* subjects, longitudinal research designs enable us to understand changes in attachment preferences *within* subjects. Therefore, compared to cross-sectional designs, longitudinal designs provide a better explanation of temporal differences in attachment preferences.

To our knowledge, only one longitudinal study on attachment preferences was conducted. Specifically, Mayseless (2004) examined changes in attachment preferences at 1 year in young males, aged 18 years at the first wave of the study, during compulsory military service. Although
young males preferred the romantic partner or the best friend over parents in multiple dimensions (i.e., secure base, proximity seeking, and safe haven), a change in seeking proximity from parents to the romantic partner or the best friend was associated with their better adjustment to the new environment of military service. Because most participants in Mayseless’ (2004) study did not have a romantic partner, her study combined attachment preferences for friends and for romantic partners. Therefore, her longitudinal study did not examine interchanges of attachment preferences for friends and for the romantic partner. Since the present longitudinal study includes both those who were in a romantic relationship and those who were not in a relationship, we can separately examine a group of young individuals who did not have a romantic partner at Wave 1 but started a romantic relationship before Wave 2 and another group of young people who stayed single from Wave 1 to Wave 2. Drawing upon findings from previous cross-sectional studies (Rosenthal & Kobak, 2010; CITATION BLINDED FOR REVIEW), we expect that the onset of a new romantic relationship will change young individuals’ attachment preferences for the romantic partner and for friends but will not change the attachment preference for parents or other family members. However, those who do not start a romantic relationship during these two time points will not change any of their attachment preferences. These longitudinal changes will enable us to understand how the onset of a romantic relationship changes emerging adults’ attachment preferences.

The Lack of Generalizable Evidence on Attachment Preferences

Since previous studies on attachment preferences during adolescence and emerging adulthood focused only on the beginning of a romantic relationship, attachment preferences have not been examined in various contexts. Therefore, it is unclear whether the patterns of changes in attachment preferences found in previous studies are generalizable (i.e., similar across different
contexts). According to attachment theory (Bowlby, 1980; Mikulincer & Shaver, 2007), when an important attachment figure becomes unavailable, one’s attachment system is necessarily reorganized. For example, the end of romantic relationships is an important transition period during which (an)other attachment figure(s) take over the position of one’s emotional security. During this period, we expect that, if generalizable patterns exist in attachment preferences during emerging adulthood, a similar pattern of changes in attachment preferences may be found. That is, those who ended their romantic relationship will decrease their attachment preference for the romantic partner and increase their attachment preference for friends. However, attachment preferences for parents and other family members will be independent during the end of romantic relationships.

The Length of Romantic Relationship and Changes in Attachment Preferences

Furthermore, previous cross-sectional studies have consistently demonstrated that a greater increase in attachment preference for the romantic partner occurs during the first two years of romantic relationships, compared to the later years (e.g., Fraley & Davis, 1997; Hazan & Zeifman, 1994). Drawing upon this finding, we expect that a greater level of increase in the attachment preference for the romantic partner will be found in earlier periods of romantic relationships compared to changes in later periods. Moreover, our previous cross-sectional study (CITATION BLINDED FOR REVIEW) also found a greater decrease in the attachment preference for friends during the first two or three years of romantic relationships, compared to the later years. Therefore, we also expect that a greater decrease in the attachment preference for friends will be found in an earlier romantic relationship, compared to a decrease in a later romantic relationship.
For emerging adults who had a romantic breakup, the length of the romantic relationship may also play an important role. Specifically, before the romantic breakup, those with a longer romantic relationship have a higher attachment preference for their partner compared to those with a shorter romantic relationship (e.g., Fraley & Davis, 1997; Hazan & Zeifman, 1994). When the romantic relationship breaks up, almost no one regardless of the romantic length seeks closeness, comfort, and security to their romantic partner any more. Therefore, when the romantic relationship breaks up, those with a longer romantic relationship is expected to have a greater decrease in their attachment preference for the partner, compared to those who have a shorter romantic relationship.

**The Present Study**

The present study has three major aims, all of which will make substantial contributions to the literature. (1) One aim is to replicate longitudinally the previous finding, which indicated that attachment preferences for the romantic partner and friends are interchanged and attachment preferences for the romantic partner and parents are independent. This study is the first longitudinal study to replicate this previous cross-sectional finding, and only a limited number of longitudinal studies exist on attachment preferences. (2) The other aim of this study is to explore changes in attachment preferences in multiple contexts, such as the beginning and ending of a romantic relationship during which attachment systems are reorganized. Although attachment preferences at the beginning of romantic relationship have been studied, attachment preferences at the end of romantic relationship have not been examined in previous studies. (3) The last aim is to examine whether the length of romantic relationship affects changes in attachment preferences. Since almost all previous studies on attachment preferences are cross-sectional, change scores of attachment preferences have not been examined.
Method

Participants and Procedure

We employed the data from a longitudinal study conducted in the Czech Republic. To obtain a diverse sample, we recruited emerging adults aged 18 to 29 years from the universities, secondary schools, companies, employment offices, newspapers, local TV broadcasting, and Czech online webpages (see CITATION BLINDED FOR REVIEW for more details). This longitudinal project consists of three data collections per year since December 2012 till July 2016. Each wave includes different sets of questionnaires related to each wave’s research theme, such as self/identity development, personality, and psychosocial adjustments. The questionnaires on the research theme of emerging adults’ relationships, such as attachment preferences, were collected during July 2013 (Wave 1) and July 2014 (Wave 2). To avoid confusion, we refer to these two data collection periods as Wave 1 and Wave 2, although this longitudinal project had more waves. In total, 1,269 young individuals ($M=21.47; SD=1.48$) participated in at least one of these two waves (728 individuals participated in both waves, and 541 individuals participated in only one of the two waves).

Regarding sample characteristics, this sample was over-represented by females (78%). Participants’ living arrangement was identified as 43% living with their friend(s), 40% living with their family, 14% living with their romantic partner, and 3% living alone. Participants’ education level was that 17% of them completed only elementary school, 78% completed secondary education, and 5% achieved higher education. Furthermore, 89% of the participants reported that their parents are both biological parents (hereafter, referred to as “parents’ biological status”), and 26% of them reported that their parents are alive but divorced or
EMERGING ADULTS’ ATTACHMENT PREFERENCES

separated (hereafter, referred to as “parents’ divorce/split”). Finally, 2% of the participants were married.

Missing data analyses were conducted. Specifically, we compared the demographic characteristics between individuals who participated in both waves and those who participated in only one of the two waves. These two groups did not differ significantly in age, living arrangement, education, marital experience, parents’ biological status, and parents’ divorce/split. However, compared to emerging adults who participated only in one wave, those who participated in both waves were more likely to be women (vs. men), $\chi^2(1, N=1236)=5.58, p=.018$. They were also more likely to study and work, $\chi^2(1, N=861)=7.57, p=.006$, or less likely to do neither, $\chi^2(1, N=861)=46.50, p<.001$, but are not necessarily likely to work only, $\chi^2(1, N=861)=0.00, p=.991$, or to study only, $\chi^2(1, N=861)=190, p=.663$. To minimize the bias toward missing data, whether participants are males (vs. females), study and work (vs. others), and neither study nor work (vs. others) were included as covariates in the following analyses. In addition, since these covariates were collected in different waves (i.e., not during Wave 1 or Wave 2), additional missing values exist in different waves. Therefore, using the Mplus (Muthén & Muthén, 1998–2015), we also employed the full information maximum likelihood estimation method, which uses all available information of each variable and its standard errors to estimate the parameters of a statistical model (e.g., Little, 2013).

Measures

Attachment preferences. Participants were asked to answer 6 open-ended questions. We used the modified scale (Fraley & Davis, 1997) based on the original scale of the WHOTO (Hazan & Zeifman, 1994; e.g., “Who is the person you don’t like to be away from?” and “Who is the person you want to be with when you are feeling upset or down?”). Participants wrote their
relationship(s) with the person(s) (e.g., the mother and the romantic partner) who best fulfilled
the needs specified in each item. They could write as many figures as they liked. For each
question, we coded whether a participant mentioned the mother, the father, the family, the
partner, and/or friend(s) (1=\textit{yes}; 0=\textit{no}). When participants responded “my family” or “my
parents,” we scored all mother, father, and family as “1=\textit{yes}.” Sibling(s) and grandparent(s) are
also included in the family category. “My friend(s)” and “classmate(s)” were also combined into
one category. The internal consistencies of the 6 items for the mother, father, family, friends, and
romantic partner were all good in both Wave 1 and Wave 2 (ranged from $\alpha=.70$ to $\alpha=.89$);
therefore, the aggregate score of the 6 items was computed by averaging all items for each figure.

\textbf{Relationship status.} Participants were also asked to answer the following dichotomous
question: “Are you currently in a romantic relationship?” (1=\textit{yes}; 0=\textit{no}). In our sample, 59%
and 64\% of participants were in a romantic relationship during Wave 1 and Wave 2, respectively.

\textbf{The length of romantic relationship.} If the participants reported to be currently in a
romantic relationship, we also asked their length of romantic relationship. The average length
was 28.86 months (SD=22.01) and 32.89 months (SD=27.16) in Wave 1 and Wave 2,
respectively.

\textbf{Results}

Means and \textit{SDs} of attachment preferences for the romantic partner, friends, the mother,
the father and the family are presented in Table 1. We report separately emerging adults who did
not have a romantic partner in Wave 1 but started a romantic relationship before Wave 2 (Group
A; \textit{n}=97), those who did not have a romantic partner in Wave 1 and did not start a relationship
before Wave 2 (Group B; \textit{n}=185), those who had a romantic partner in Wave 1 and broke up
with the partner before Wave 2 (Group C; \(n=69\)), and those who had a romantic partner in both
Wave 1 and Wave 2 (Group D; \(n=379\)).

Using Mplus statistical software (Muthén & Muthén, 1998–2015), we conducted a series
of latent difference score analyses (see Table 1), which enable us to estimate means and
individual differences in changes in attachment preferences between the two different time points
(e.g., Grimm, An, McArdle, Zonderman, & Resnick, 2012; Little, Bovaird, & Slegers, 2006). In
this analysis, a latent variable is constructed as the change score by structurally modeling the
variance at Wave 2 as a function of the one caused by Wave 1 plus the one different from Wave
1. Finally, since the models are just-identified or saturated, the model fit indices are not reported.

The analyses revealed that participants who did not have a romantic partner in Wave 1
but started a romantic relationship before Wave 2 (Group A) had a significant increase in their
attachment preference for the romantic partner and a significant decrease in their preference for
friends. Participants who did not have a romantic partner in both waves (Group B) had no
significant changes in any attachment preferences. Those who had a romantic partner in Wave 1
and broke up with the partner before Wave 2 (Group C) had a decrease in their attachment
preference for the romantic partner and an increase in their preference for friends. Finally,
participants who had a romantic partner in both waves (Group D) had an increase in their
attachment preference for the romantic partner and a decrease in their preference for friends.
Across all groups, none of the latent difference scores for attachment preferences for the mother,
father, or family were significant.

**Multiple Regression Analyses**

To examine the extent to which these significant changes in attachment preferences for
romantic partner and friends are related to the length of romantic relationship, we employed
multiple regression analyses (see Table 2). We saved the factor scores of changes in attachment preferences generated from the previous latent difference analyses in a different file and used them as the dependent variables of regression analyses. The independent variable was the length of romantic relationship. Covariates were sex, study and work, and neither study nor work. We also included age as another covariate because the range of age was quite large (i.e., from 18 years to 29 years). Finally, before running regression analyses, we conducted multiple imputations using all 1,269 participants. When dealing with missing data, the multiple imputation technique is considered less biased, compared to listwise or pairwise deletion techniques (e.g., Little, 2013). To conduct better imputations (e.g., Enders, 2013), we used the following auxiliary variables: age, sex, living arrangement, education, work and study statuses, marital experience, parents’ biological status, and parents’ divorce/split.

Results revealed that only for emerging adults who had a romantic partner in both waves (Group D), the length of romantic relationship was negatively related to a change in attachment preference for the romantic partner and positively related to a change in attachment preference for friends. For those who started or ended their romantic relationship between the two time points (Group A and Group C), the length of romantic relationship was not related to changes in attachment preferences.

Discussion

The present one-year longitudinal study made three major contributions to the literature. (1) It replicated previous cross-sectional findings (Rosenthal & Kobak, 2010; CITATION BLINDED FOR REVIEW), indicating that the attachment preference for the romantic partner is interchanged with the attachment preference for friends and independent of the attachment preferences for parents. (2) We found evidence of this pattern when investigating two different
transition periods of attachment preferences, that is, the beginning and the end of romantic relationships. (3) Finally, we found some evidence that the length of romantic relationships is associated with changes in attachment preferences for the romantic partner and friends.

Consistent with previous cross-sectional studies (Rosenthal & Kobak, 2010), our longitudinal study also found that the preference for parents is not associated with the preference for the romantic partner. From the developmental standpoint, the shift from parents to peers (including both friends and the romantic partner) has already occurred during adolescence (e.g., Hazan & Zeifman, 1994). Therefore, emerging adults who have already completed this developmental shift may be quite capable of shifting between their attachment preferences for the romantic partner and for friends without affecting their relationship with parents. However, we expect that adolescents who have not completed this developmental shift may not show this independent pattern between attachment preferences for parents and the romantic partner as clearly as do emerging adults.

Moreover, seeking attachment to the romantic partner in early and middle adolescence may not function as same as does in late adolescence and emerging adulthood. Young people in the stage of early adolescence are casually reorienting their interests from the same gender peers to the opposite peers mainly due to their physical attractiveness, whereas those in the stage of late adolescence are more likely to seek emotional and personal support (Brown, 1999). In fact, early intensive involvement in a romantic relationship before late adolescence results in negative developmental outcomes, such as internalizing/externalizing symptoms, social incompetence with peers, and low academic performance (Zimmer-Gembeck, Siebenbruner, & Collins, 2001). Hence, different patterns of attachment preferences during early and middle adolescence are
expected to be found. Future research on attachment preferences might examine longitudinal changes during adolescence.

Another important contribution of this study to the literature is that the interchange between attachment preferences for the romantic partner and friends and the independence between attachment preferences for the romantic partner and parents were also found in the context of romantic breakup. However, the generalizability of this pattern should be examined further, as it is unclear whether this process can be applied in different attachment contexts. For example, individuals who lose parents need to reorganize their hierarchy of attachment needs (see Mikulincer & Shaver, 2007). This process has not been explored in empirical studies. It is unclear whether the loss of one parental figure is related more to an increase in the preference for the other parent or to an increase in the preference for the romantic partner and/or friends. Drawing upon the findings from this study, the loss of a parental figure may be independent of the preference for the romantic partner/friends, but it may be associated with an increase in the preference for the other parental figure. More studies exploring reorganizations of attachment preferences in various contexts are needed in future.

Finally, the present study demonstrated the negative association between the length of romantic relationship and a change in the attachment preference for the romantic partner and the positive association between the romantic length and a change in attachment preference for friends. However, this finding was only the case for emerging adults who had a romantic partner both at Wave 1 and Wave 2 (Group D), but not for those who had a romantic partner only at Wave 1 (Group A) or Wave 2 (Group C). One reason for the non-significant findings in those who had a romantic partner only at Wave 1 or Wave 2 could be that our sample size for those in Group A or Group C was relatively small, which may not have the enough power to detect the
statistical significance. Another reason could be that only one year of the romantic relationship may not be long enough to detect changes in attachment preferences. Nonetheless, the finding on the association between the length of romantic relationship and changes in attachment preferences replicated previous cross-sectional findings (Rosenthal & Kobak, 2010; CITATION BLINDED FOR REVIEW). Future studies should further explore additional factors which influence changes in attachment preferences. For example, in American and European cultures, many emerging adults start living with friends and parents, whereas others remain staying with their parents (Seiffge-Krenke, 2013). Therefore, their living arrangement might play an important role in changes in attachment preferences in emerging adulthood.

Limitations and Future Directions

One limitation of the present study is that females were overly represented in this study. We controlled for participants’ sex in our regression analyses to minimize biases in our results. However, gender differences in attachment preferences should be more thoroughly examined in future studies. To increase the likelihood of successful model convergence, we separately estimated latent difference scores of attachment preferences for partner, friends, mother, father, and family. Using data with more time points, future studies need to conduct a holistic model in which attachment preferences with different figures interdependently or independently change with each other. Although the present study clearly suggests that a relationship initiation or termination leads to changes in attachment preferences, the opposite direction from changes in preferences to the initiation or breakup may also be occurring. Future studies should examine the bidirectionality of this association.
Finally, to assess attachment preferences, the present study employed the WHOTO measure (Fraley & Davis, 1997; Hazan & Zeifman, 1994), in which participants were asked to write their relationship(s) with the person(s) (e.g., the mother and the romantic partner) who best fulfilled the needs specified in each item. However, some answers were “my parents” and “my family” which are not one specific person. Therefore, to more precisely understand which particular attachment figure is preferred, future studies may need to ask participants to report an individual person(s) (not groups).

Conclusions

Focusing on two different transition periods of romantic relationships (the beginning and the ending), the present study demonstrated the same pattern of longitudinal shifts of attachment preferences, that is, emerging adults’ attachment preference for the partner was interchanged with their attachment preference for friends, but it was independent from parents. However, this study is one of a few longitudinal studies on attachment preferences, and its sample characteristics are a greater number of females (than males) who are more employed as well as studied and recruited in a single European country (the Czech Republic); therefore, more longitudinal studies are needed to strengthen the evidence. In addition, this study focused only on two contexts; hence, future studies should further examine the generalizability of attachment preferences.
Acknowledgements

We would like to thank Lucie Hrubá for her coding of attachment preferences. We also thank our colleagues who conducted this research project together with us.
References


Umemura, T., Jacobvitz, D., Messina, S., & Hazen, N. (2013). Do toddlers prefer the primary caregiver or the parent with whom they feel more secure? The role of toddler