Not all attachment relationships develop alike: Normative cross-sectional age trajectories in attachment to romantic partners, best friends, and parents

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ABSTRACT

Previous research has found that age is negatively correlated with general-romantic attachment anxiety and positively correlated with general-romantic attachment avoidance. The present study examined cross-sectional age trajectories in global attachment, as well as relationship-specific attachment with romantic partners, best friends, mothers, and fathers. Across all specific relationships, older individuals reported higher attachment avoidance. In contrast, attachment anxiety with romantic partners and friends was negatively associated with age, whereas attachment anxiety with parents normatively *increased* as a function of age. These findings underscore the importance of examining the normative age trajectories of attachment across both global and specific levels of abstraction.

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1. Introduction

Attachment theory was originally developed to explain the emotional bonds that develop between infants and their primary caregivers (Bowlby, 1951). Nonetheless, Bowlby quickly came to the realization that attachment dynamics are not limited to infant–caregiver relationships. Rather, he proposed that attachment is a fundamental feature of people's social and emotional experiences across the lifespan—"from the cradle to the grave" (Bowlby, 1969, p. 208). Indeed, a large body of research now exists examining individual differences in attachment *working models*—beliefs and expectations regarding close relationships—and how those working models predict the types of relational goals people pursue in adulthood (e.g., Campbell, Simpson, Kashy, & Fletcher, 2001; Mikulincer & Shaver, 2007), relationship functioning and well-being with romantic partners (e.g., Simpson & Rholes, 2010) and friends (e.g., Bauminger, Finzi-Dottan, Chason, & Har-Even, 2008; Grabill & Kerns, 2000), ability to adapt to crises (e.g., Fraley, Fazzari, Bonanno, & Dekel, 2006), biases in perception and memory (e.g., Collins, 2006; Fraley & Brumbaugh, 2007; Simpson, Rholes, & Winterheld, 2009), and a host of other important life

and relationship outcomes (for an overview, see Mikulincer & Shaver, 2007).

Because of its relevance to understanding a wide array of phenomena, an increasing number of researchers have argued that it is important to examine how the security of working models varies normatively across the life course (e.g., Chopik & Edelstein, 2014; Chopik, Edelstein, & Fraley, 2013; Magai, 2008). Specifically, scholars have postulated that commonly shared, age-graded life experiences—such as gaining independence from one's parents or investment in romantic relationships—might sculpt most people's attachment representations in similar ways over the life course, producing normative developmental trends (Chopik & Edelstein, 2014; Chopik et al., 2013; Magai, 2008). To this end, several studies have examined cross-sectional age differences in the working models people hold about romantic relationships in general and have found that, on average, older individuals report higher levels of attachment avoidance (i.e., a discomfort with closeness and dependency) and lower levels of attachment anxiety (i.e., concerns about abandonment and one's own suitability as a romantic partner) (Birnbaum, 2007; Chopik et al., 2013; Diehl, Elnick, Bourbeau, & Labouvie-Vief, 1998; Mickelson, Kessler, & Shaver, 1997; Segal, Needham, & Coolidge, 2009). One recent study replicated these trends across more than 80 countries, suggesting that the development of attachment is similar across different social and cultural settings (Chopik & Edelstein, 2014). Furthermore, these patterns have also been observed in at least one extended longitudinal study, indicating that the cross-sectional correlations

between age and attachment working models may partly represent true developmental processes, rather than reflecting cohort effects alone (Klohnen & John, 1998).

Although the specific processes underlying these developmental patterns are not well understood, scholars have speculated that they are likely attributable to a combination of maturation processes (e.g., normative declines in negative affectivity that occur with age; Roberts & Mroczek, 2008) as well as common, age-graded life experiences that affect people in similar ways (Chopik et al., 2013). For example, Chopik et al. (2013) argued that normative increases in avoidance—especially in young adulthood—might be driven by the process of becoming progressively less dependent on one's parents. In contrast, normative declines in attachment anxiety may be the result of settling into enduring romantic relationships, in which fears of abandonment gradually diminish over time (see Eastwick & Finkel, 2008).

2. Does normative development in attachment differ across relationship contexts?

To date, all of the existing studies linking attachment working models to age have utilized measures of *general-romantic* attachment working models. Specifically, as can be seen in Fig. 1, the most prevalent measures of attachment—including the Experiences in Close Relationships scale (ECR; Brennan, Clark, & Shaver, 1998) and its Revision (ECR-R; Fraley, Waller, & Brennan, 2000)—contain questions that ask people how they approach *romantic relationships in general*. Thus, these measures are "general" in the sense that they do not explicitly target how the respondent feels about a *specific person*, but they are not *global* because they clearly target the romantic domain rather than, for example, the parental domain.

However, scholars have recently emphasized the idea that attachment working models can vary across levels of specificity—ranging from, on the broader end, individuals' *global* representations of people in general to, on the more narrow end, representations of specific individuals (e.g., specific romantic partners, mothers/fathers, specific peers) (Collins & Read, 1994; Sibley & Overall, 2008, 2010). One consequence of this idea is that it is possible for an individual to have a relatively secure relationship with his or her romantic partner, for example, but to have a considerably less secure relationship with his or her parents. Similarly, it is possible that even within one relational domain—romantic relationships—an individual might have a secure representation of close relationships in general, despite having a relatively insecure bond with a specific partner.

The fact that people's attachment working models vary in terms of specificity raises the possibility that attachment working models in different relational domains (e.g., parental, romantic) might exhibit disparate developmental patterns over the life course. For example, although older individuals tend to report lower levels of general-romantic attachment anxiety (Birnbaum, 2007; Chopik et al., 2013; Diehl et al., 1998; Mickelson et al., 1997; Segal et al., 2009), it is possible that age is positively correlated with attachment anxiety with respect to one's parents. Indeed, the possibility that working models might develop in different ways in distinct relational contexts was anticipated by Chopik et al. (2013), who proposed that the positive correlation between age and attachment avoidance might be attributable to increasing desires for independence and other parental dynamics in young adulthood, whereas declines in anxiety with age might be akin to the numerous emotional benefits of investing in romantic relationships across the lifespan (e.g., Eastwick & Finkel, 2008; Lehnart, Neyer, & Eccles, 2010).

Similarly, the development of people's *global* working models may differ from that of their general-romantic and/or relationship-specific working models. Specifically, researchers in related fields have observed that global assessments (e.g., of well-being) can be constructed in either a bottom-up (e.g., aggregating across all information relevant to one's well-being to form an overall assessment) or top-down fashion (e.g., relying on heuristics and intuitions about how happy one is) (e.g., Heller, Watson, & Ilies, 2004; Lucas & Diener, 2008). To the extent that people's global working models are constructed in a bottom-up fashion, the correlations between age and global working models may simply represent some weighted average of the developmental patterns across people's relationship-specific working models. In contrast, if people construct global working models in a top-down fashion—relying on heuristics, rather than summarizing across all relevant information in their lives—it is possible that people's global working models may develop entirely independently of their more specific working models.

Despite the importance of understanding how people's working models develop across different levels of specificity, to the best of our knowledge, no previous studies have explicitly examined the associations between age and attachment working models globally or with respect to specific relationship domains. To fill this gap in the empirical literature, we used the ECR-Relationships Structures (ECR-RS; Fraley, Heffernan, Vicary, & Brumbaugh, 2011) questionnaire to measure people's working models with respect to close relationships globally, and also with respect to four specific individuals—their current romantic partners, best friends, mothers,
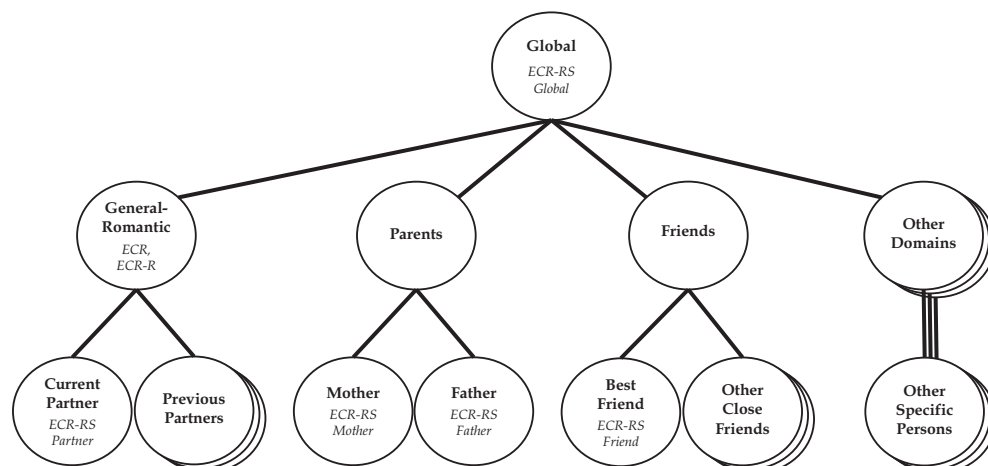

Fig. 1. The hierarchical organization of attachment working models, and measures that tap each level.

and fathers. As can be seen in Fig. 1, the ECR-RS global subscales capture people's working models across *all* close relationships in their lives. In contrast, the ECR-RS partner-specific, mother-specific, father-specific, and friend-specific subscales capture people's working models with respect to *specific* individuals. Thus, as compared with the ECR, which taps *general-romantic* attachment, the ECR-RS global subscale is a broader construct that captures people's feelings about close others in general. In contrast, the ECR-RS partner-specific subscale is a narrower construct, capturing people's feelings about only their *current* romantic partner. Participants' responses to these measures were used to examine the cross-sectional associations between age and attachment working models in each of these relational domains.

2.1. Developmental trends in global attachment representations

Global attachment models are thought to be generalized representations of the way in which people think about themselves and significant others. Based on Bartholomew and Horowitz's (1991) pioneering research, many contemporary scholars emphasize two dimensions that underlie these working models. The first, attachment anxiety, is based in people's *working models of self* and reflects variation in the extent to which people feel that they are worthy of love, affection, and positive regard. Although attachment anxiety is not the same "thing" as self-esteem, it does overlap with various measures of self-worth (Bartholomew & Horowitz, 1991). This raises the possibility that the association between age and global anxiety might parallel that between age and self-esteem. Studies utilizing cross-sectional methods have found that, between the ages of 18 and 65, there is a positive association between age and self-esteem (Robins, Trzesniewski, Tracy, Gosling, & Potter, 2002). Extrapolating from these findings, we might expect the inverse of this pattern for global assessments of attachment-related anxiety. That is, global attachment anxiety may be negatively related to age.

The second attachment dimension, attachment avoidance, reflects variation in the positivity (or negativity) of people's *working models of others*—whether people believe that others are trustworthy and available. It is less clear what developmental trends to expect regarding global attachment-related avoidance. On the one hand, it might be reasonable to expect global avoidance to be positively associated with age. For example, Chopik et al. (2013) found that avoidance, as assessed with the ECR-R, tends to be positively associated with age. Although the ECR-R is typically regarded as a measure of general-romantic attachment (see Fig. 1), studies suggest that global avoidance in adults is more saturated with variation in the way people relate to romantic partners and peers than it is with variation in the way they relate to their parents (see Fraley, Hudson, Heffernan, & Segal, 2015). On the other hand, it is possible that people become more trusting of others and willing to depend on them over time. Indeed, research on personality development suggests that people develop in ways consistent with the maturity principle (Roberts, Wood, & Caspi, 2008): they become more agreeable, conscientious, and emotionally stable. This maturational process has the potential to manifest in lower levels of avoidance in older individuals, as compared to younger ones.

2.2. Partner-specific developmental trends

What types of developmental patterns should we expect to find for partner-specific anxiety and avoidance? Based on previous research that has examined general-romantic attachment, we might expect partner-specific attachment anxiety to be negatively correlated with age (Birnbaum, 2007; Chopik & Edelstein, 2014; Chopik et al., 2013; Diehl et al., 1998; Mickelson et al., 1997;

Segal et al., 2009). Such a pattern might be observed for several reasons. First, as people gain experience in romantic relationships, they tend to exhibit decreases in attachment anxiety (Eastwick & Finkel, 2008) and increases in emotional stability and self-esteem (Lehnart et al., 2010). Experiences of being loved, valued, and not forsaken in romantic relationships throughout the lifespan may attenuate negative affectivity, including concerns about abandonment, which would manifest as a negative relationship between age and both global- and partner-specific anxiety.

Conversely, Chopik et al. (2013) found that, for people in romantic relationships, general-romantic attachment avoidance increased as a function of age in early adulthood, before plateauing and decreasing in old age. Although the ECR is not a measure of attachment toward a *specific* romantic partner, we nonetheless assume that these two kinds of measures will track each other closely.[1] Thus, we expect age to be positively associated with the avoidance that people report with respect to their romantic partners. One reason this pattern may emerge is that, as individuals transition into generative caretaking roles (for children, elderly parents) (Erikson, 1968, 1974), their ability to invest as heavily in other relationships (e.g., romantic ones) may be restricted. Such a tendency might manifest as increased avoidance toward romantic partners. Nonetheless, there are also reasons to suspect that partner-specific avoidance may be negatively correlated with age. Given that experience with romantic relationships is associated with decreased negative affectivity (e.g., Eastwick & Finkel, 2008; Lehnart et al., 2010), discomfort with intimacy (i.e., avoidance) may ebb with age.

2.3. Developmental trends in other attachment relationships

It is less clear what to expect in terms of how age might be related to attachment working models pertaining to best friends. People may develop increased comfort in depending on their friends with age, leading to negative associations between age and friend-specific attachment anxiety and avoidance across the lifespan. In contrast, desires for independence or shifts toward romantic and subsequently generative relationships (which potentially must be leveraged against other relationships) (Erikson, 1974; Kalmijn, 2003) may lead to increases in anxiety (fears that friends will not be available for one's needs) or avoidance (desire to avoid depending on friends) as a function of age. Finally, given that best friendships may vary qualitatively from person-to-person (Hartup & Stevens, 1999), we might expect negligible normative development in friend-specific attachment.

In people's relationships with their parents, we might expect to observe a positive association between age and *both* attachment anxiety and avoidance. With respect to anxiety, normative pressures in young adulthood to transition away from relying on one's parents (Erikson, 1968) might foster anxiety for individuals regarding whether they will be able to continue to depend on their parents for support. In middle-age and later adulthood, several factors may lead to increased anxiety with respect to one's parents. For one, individuals are often challenged with becoming a caregiver for their elderly parents, which might alter how they view

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[1] Data from an unrelated study can somewhat speak to this issue. In one sample of 226 college students, the correlations between the ECR-R and the ECR-RS partner-specific scales ranged *r* = .74–.77, whereas the correlations between the ECR-R and the ECR-RS global scales ranged *r* = .42–.52. When the ECR-R dimensions were regressed onto the partner-specific and global dimensions simultaneously, results suggested that the ECR-R primarily taps partner-specific models (*β*s = .76, .85), rather than global ones (*β*s = −.05, .12). Empirically, it appears that, at least for college students, the ECR-R and ECR-RS partner-specific subscale measure nearly identical constructs. However, in older samples (who presumably have had a greater lifetime number of romantic partners) "romantic" and "partner-specific" models may diverge. As such, throughout this article we continue to draw a distinction between more general "romantic" working models and "partner-specific" ones.

their relationships with their parents (Cicirelli, 2000). Along these lines, anxiety regarding the availability of one's parents might be heightened when age-related illnesses threaten the health and lives of one's parents. Beyond these factors, it is also possible that other social transitions that occur for parents in older adulthood (e.g., retiring, moving to a new area/state) might make them less accessible (Löckenhoff, Terracciano, & Costa, 2009), increasing the attachment anxiety felt by their children.

We might also expect to observe positive associations between age and parent-specific avoidance. In young adulthood, people tend to desire independence from their parents (Erikson, 1968) and also shift their relational priorities toward peers, rather than their mothers and fathers (e.g., Fraley & Davis, 1997; Pitman & Scharfe, 2010). This should theoretically result in a positive association between avoidance with respect to one's parents and age (Chopik et al., 2013).

2.4. Overview of the present study

In the present studies, we collected measures of attachment in five relational domains (global, partner, best friend, mother, father) from two independent internet samples, each with more than 2250 participants. These data were used to examine associations between age and attachment working models in each of the five relational domains.

3. Method

3.1. Participants

3.1.1. Sample 1

A total of 3092 participants were recruited online, at the second author's website (www.yourpersonality.net). Users can find the website via internet searches (e.g., "free personality tests"), through links on social media, or through any other websites that might feature links to hosted studies. Visitors to the website complete personality tests and experiments as a recreational/leisure activity in order to obtain feedback about their personalities. This study was described as a free personality test that provided feedback about participants' attachment relationships with specific people in their lives. Although anyone who visits the website may complete the survey, our inclusion criteria for the analytic sample was that people (a) reported being between the ages of 18 and 65 inclusive, (b) indicated that they had not taken the survey before [the default option in the survey is set to designate that the user has taken the survey before; the user must manually toggle the response to be included], and (c) that they did not have missing data for any of the attachment composites. Of those who participated, 629 participants were excluded from analyses: 416 were younger than 18 or older than 65 years of age; 250 indicated that they had already completed the study before; and 46 did not complete all measures. The final sample size of 2380 participants enabled greater than 99% power to detect zero-order effects as small as $r = .09$, and 80% power to detect any effect equal to or larger than $r = .06$.

Participants in the final sample were predominantly female (77%), with a mean age of 28.51 years ($SD = 11.53$). Fifty-four percent of the sample ($n = 1269$) was currently involved in a romantic relationship at the time the study was conducted, and the length of their relationships ranged from less than a month to 40 years ($M = 5.66$ years, $SD = 7.73$ years). The vast majority of participants' mothers were still alive ($n = 2184$; 92%); as were their fathers ($n = 2023$; 85%). We did not collect information about participants' racial or ethnic backgrounds.

3.1.2. Sample 2

A second sample was collected to provide a direct replication. The desired sample size (2300 usable cases) and inclusion/exclusion criteria were preregistered in advance on Open Science Framework (OSF; https://osf.io), along with our hypotheses and planned analyses (the preregistration can be accessed at https://osf.io/quk9a/). In order to obtain sufficient usable cases, data were collected from a total of 3038 participants. Of these, 2251 met the preregistered inclusion criteria of (1) being between the ages of 18 and 65 inclusive, (2) indicating that they had not completed the study before, and (3) completing all measures.[2] The final sample was 79% female, with a mean age of 31.38 years ($SD = 12.09$). Fifty-nine percent of the sample ($n = 1324$) indicated that they were in a romantic relationship. Ninety percent ($n = 2018$) had living mothers, and 83% ($n = 1859$) had fathers who were still alive.

3.2. Measures

Participants self-reported their attachment representations using the Experiences in Close Relationships-Relationships Structures questionnaire (ECR-RS; Fraley et al., 2011). The ECR-RS is a shortened version of the Experiences in Close Relationships-Revised inventory (ECR-R; Fraley et al., 2000) that is designed to assess attachment working models with respect to specific relationships. In the present study, participants first provided ratings of their global attachment security with respect to close relationships in general (see Fraley et al., 2015). Subsequently, they rated their attachment working models with respect to their current romantic partners, best friends, mothers, and fathers. In comparison to the ECR-R (which measures how people view romantic partners in general), the ECR-RS global subscale is a broader construct that is not constrained to romantic contexts. In contrast, the ECR-RS partner subscale is a narrower construct than romantic (ECR-R) attachment that measures feelings with one's *current* partner (rather than with partners in general) (see Fig. 1 and Footnote [1]).

Within each relationship, the ECR-RS has subscales measuring attachment anxiety (3 items) and avoidance (6 items). Attachment anxiety concerns the extent to which a person is concerned about the availability and responsiveness of the target (e.g., "I'm afraid that this person may abandon me"). Attachment avoidance concerns the extent to which the person is comfortable depending on the target and using him or her as an attachment figure. On the high end of this dimension are people who are uncomfortable with closeness and dependency (e.g., "I don't feel comfortable opening up to my partner"); on the low end of this dimension are people who are more comfortable using others as a secure base and safe haven (e.g., "I find it easy to depend on my partner"). A prototypically secure person is low in both anxiety and avoidance.

All items were rated on a 7-point Likert scale from 1 (*strongly disagree*) to 7 (*strongly agree*). Items were averaged together (and reverse scored as necessary) to form anxiety and avoidance composites for each of the five relationship domains (αs ranged from .80 [Sample 2 avoidance with best friend] to .92 [Sample 1 avoidance with mother]).

4. Results

Descriptive statistics and intercorrelations for all study variables are presented in Table 1. Although the samples were generally comparable to each other, our large sample sizes allowed us to detect numerous relatively small—albeit statistically significant—differences between them. As compared with their peers in

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[2] After collecting data from 2300 apparently usable cases and ceasing data collection, during data analysis, we discovered an additional 49 repeated users, yielding fewer usable cases than expected.

Sample 2, the participants in Sample 1 were slightly younger ($d = -0.24$, 95% CI [−0.30, −0.18]),[3] more likely to be single ($d = 0.05$, 95% CI [0.03, 0.08]), more likely to have living mothers ($d = 0.02$, 95% CI [0.01, 0.04]) and fathers ($d = 0.02$, 95% CI [0.003, 0.05], and they also reported slightly higher levels of global anxiety ($d = 0.17$, 95% CI [0.11, 0.23]), global avoidance ($d = 0.14$, 95% CI [0.09, 0.20]), partner-specific anxiety ($d = 0.12$, 95% CI [0.06, 0.18]), and friend-specific anxiety ($d = 0.09$, 95% CI [0.03, 0.15]). In contrast, the samples did not differ with respect to gender composition ($d = 0.03$, 95% CI [−0.02, 0.09]), relationship length ($d = -0.07$, 95% CI [−0.17, 0.04]), partner-specific avoidance ($d = 0.05$, 95% CI [0.00, 0.11]), friend-specific avoidance ($d = 0.02$, 95% CI [−0.04, 0.08]), mother-specific anxiety ($d = 0.01$, 95% CI [−0.05, 0.07]) and avoidance ($d = 0.05$, 95% CI [−0.01, 0.10]), and father-specific anxiety ($d = -0.04$, 95% CI [−0.09, 0.02]) and avoidance ($d = 0.00$, 95% CI [−0.06, 0.06]). Notably—despite the fact that there were numerous statistically significant differences between the samples—the magnitudes of these discrepancies were quite small. Thus, the samples were generally comparable to one another.

For each relationship domain (global, romantic partner, best friend, mother, and father), we estimated the parameters of two models: one containing only a linear age term (Table 2), and a second containing both linear and quadratic age terms (Table 3) (linear analyses were conducted because, due to collinearity issues, controlling for quadratic age effects can sometimes mask linear effects). In all analyses, age was mean-centered and was scaled in terms of decades (i.e., age/10). As such, the coefficients are interpretable as the normative expected increase or decrease in anxiety or avoidance *per decade of life*.[4] Quadratic terms were created by squaring the mean-centered decade variable (i.e., [age/10]^2). In all figures, we plotted the model-predicted age trajectories from the curvilinear models—even when the quadratic terms were not statistically significant. We did so because the estimated regression coefficients are unbiased estimators of the true parameters (Hays, 1994, p. 601) and thus, whether statistically significant or not, represent our "best guess" about the true parameters (see also Lykken, 1968; Meehl, 2006). Nonetheless, for non-statistically significant quadratic effects, the degree of curvature is trivial, even if visible, and a linear trend line falls fully within the shaded 95% confidence region. In virtually all cases summarized below, the quadratic terms simply serve to prevent the functions from increasing (or decreasing) without bounds over the age range sampled; they do not create dramatic reversals in rates and directions of change.

For analyses of attachment to romantic partners and parents, data were analyzed only from participants who were currently in a romantic relationship, or for whom the appropriate parent was living, respectively. We controlled for avoidance when modeling the age trajectories in anxiety (and vice versa) because anxiety and avoidance, as measured via the ECR-RS, tend to be moderately correlated (Fraley et al., 2011). Consequently, it might be the case that age differences in avoidance, for example, simply reflect age differences in anxiety. By mutually controlling each dimension in our analyses, we were able to isolate the extent to which each dimension independently increases, decreases, or remains the same as a function of age.

For parsimony, we focus our narrative on Sample 1. Unless otherwise noted, all Sample 1 analyses were directly replicated

in Sample 2. Parameter estimates from both samples can be found in Tables 2 and 3.

4.1. Global attachment

In Sample 1, we found negative linear associations between age and global anxiety ($b_L = -0.18$, 95% confidence interval [CI] [−0.23, −0.12], $\beta_L = -0.13$).[5] There was not, however, a statistically significant quadratic association between age and global anxiety ($b_Q = 0.05$, 95% CI [0.00, 0.09], $\beta_Q = 0.06$). As can be seen in the left-hand panels of Fig. 2, these coefficients indicate that, for each decade of life, participants tended to report 0.18 scale units less global anxiety.

Contrasting with the global anxiety findings, we found no statistically significant linear ($b_L = 0.00$, 95% CI [−0.04, 0.04], $\beta_L = 0.00$) or quadratic ($b_Q = 0.03$, 95% CI [0.00, 0.07], $\beta_Q = 0.06$) normative development in global avoidance over time. As can be seen in the right-hand panels of Fig. 2, it appears that global avoidance does not systematically vary across different age groups.

4.2. Partner-specific attachment

In alignment with the global anxiety findings, there was a negative linear association between age and partner-specific anxiety ($b_L = -0.24$, 95% CI [−0.31, −0.16], $\beta_L = -0.16$). There was, however, no quadratic association between age and partner-specific anxiety ($b_Q = 0.02$, 95% CI [−0.05, 0.08], $\beta_Q = 0.02$). As can be seen in the top-left panels of Fig. 3, for each decade of life, people tended to report 0.24 scale units less partner-specific anxiety.

In contrast to the global avoidance findings, there was a positive linear association between age and partner-specific avoidance ($b_L = 0.26$, 95% CI [0.21, 0.31], $\beta_L = 0.24$). These coefficients indicate that, for each decade of life, participants tended to increase an average of 0.26 scale units in partner-specific avoidance. Although there was not a statistically significant quadratic trend in Sample 1 ($b_Q = -0.02$, 95% CI [−0.07, 0.02], $\beta_Q = -0.04$), there was a curvilinear association between age and partner-specific avoidance in Sample 2 ($b_Q = -0.07$, 95% CI [−0.11, −0.03], $\beta_Q = -0.12$). As can be seen in the top-right panels of Fig. 3, it may be the case that increases in partner-specific avoidance tend to level off with age.[6]

4.3. Best-friend specific attachment

For our next series of analyses, we examined age trajectories in people's attachment working models with respect to their best friends. Older individuals tended to report lower anxiety ($b_L = -0.12$, 95% CI [−0.17, −0.07], $\beta_L = -0.09$), and higher avoidance ($b_L = 0.10$, 95% CI [0.06, 0.13], $\beta_L = 0.10$) in their relationships with their best friends. The linear avoidance trend was buffered by a negative quadratic effect in Sample 2 ($b_Q = -0.04$, 95% CI [−0.07, −0.01], $\beta_Q = -0.07$)—but not in Sample 1 ($b_Q = -0.03$, 95% CI [−0.06, 0.01], $\beta_Q = -0.04$). As can be seen in the lower-right panels of Fig. 3, these findings may tentatively suggest that normative increases in friend-specific avoidance tend to level-off in middle age. Notably, development in friend-specific attachment security followed a very similar trajectory to partner-specific attachment—although the magnitude of effects was considerably smaller for friend-specific attachment.

4.4. Parent-specific attachment

For our next series of analyses we examined how attachment to

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[3] In this section, ds and 95% CIs were computed by standardizing each variable and regressing it onto a dummy-coded variable indicating which sample the participant was in (Sample 1 = 1; Sample 2 = 0).

[4] This linear transformation of the age variable does not affect the significance of any coefficient, nor does it affect the standardized regression coefficients. This transformation was used because—especially in the curvilinear analyses—it produced coefficients that were more intuitive and interpretable than when age was scaled in terms of years (e.g., when scaled in years, the curvilinear analyses often produced coefficients that required up to five decimal places to express accurately).

[5] We use "L" subscripts for linear terms and "Q" subscripts for quadratic terms.

[6] None of the partner-specific coefficients were statistically significantly changed by controlling for the length of participants' current romantic relationships.

Table 1
Descriptive statistics and correlations for all study variables.

	Sample 1		Sample 2		Correlations										
	M	SD	M	SD	1	2	3	4	5	6	7	8	9	10	11
1. Age	28.51	11.53	31.38	12.09	–	−.11	−.11	−.03	**.22**	**.14**	−.03	**.10**	.07	**.26**	**.12**
Anxiety															
2. Global	4.45	1.62	4.19	1.66	**−.14**	–	**.57**	**.46**	**.35**	**.34**	**.19**	**.19**	**.13**	**.21**	**.24**
3. Partner	3.95	1.84	3.73	1.88	**−.12**	**.53**	–	**.31**	**.25**	**.26**	**.16**	**.44**	.07	**.16**	**.18**
4. Friend	2.88	1.61	2.74	1.54	−.05	**.44**	**.28**	–	**.31**	**.30**	**.24**	**.16**	**.48**	**.21**	**.22**
5. Mother	2.28	1.60	2.26	1.58	**.18**	**.29**	**.23**	**.34**	–	**.47**	**.22**	**.23**	**.21**	**.56**	**.22**
6. Father	2.56	1.71	2.62	1.73	**.13**	**.27**	**.20**	**.33**	**.45**	–	**.14**	**.13**	**.14**	**.25**	**.57**
Avoidance															
7. Global	3.75	1.19	3.57	1.22	−.03	**.24**	**.17**	**.23**	**.15**	**.16**	–	**.41**	**.45**	**.37**	**.25**
8. Partner	2.82	1.28	2.76	1.31	**.12**	**.19**	**.41**	**.14**	**.18**	**.13**	**.40**	–	**.27**	**.26**	**.19**
9. Friend	2.59	1.18	2.56	1.15	.07	**.12**	.07	**.48**	**.12**	**.14**	**.42**	**.21**	–	**.18**	**.17**
10. Mother	3.62	1.67	3.54	1.72	**.22**	**.19**	**.11**	**.17**	**.48**	**.17**	**.29**	**.20**	**.25**	–	**.34**
11. Father	4.20	1.66	4.20	1.70	**.10**	**.20**	**.11**	**.17**	**.13**	**.50**	**.27**	**.16**	**.20**	**.30**	–

Note. Correlations in **boldface** are significant, $p < .05$; correlations for Sample 1 are listed in the lower matrix; correlations for Sample 2 are listed in the upper matrix.

Table 2
Linear associations between age and attachment working models.

Outcome	Sample 1							Sample 2						
	Intercept			Age/10				Intercept			Age/10			
		95% CI			95% CI				95% CI			95% CI		
	b	LB	UB	b	LB	UB	β	b	LB	UB	b	LB	UB	β
Anxiety														
Global	4.47	4.41	4.53	**−.18**	−.23	−.12	**−.13**	4.19	4.12	4.26	**−.14**	−.19	−.08	**−.10**
Partner	3.67	3.58	3.76	**−.24**	−.31	−.16	**−.16**	3.49	3.40	3.58	**−.25**	−.32	−.17	**−.17**
Friend	2.88	2.83	2.94	**−.12**	−.17	−.07	**−.09**	2.74	2.68	2.80	**−.07**	−.12	−.03	**−.06**
Mother	2.24	2.18	2.30	**.08**	.02	.14	**.05**	2.21	2.15	2.27	**.06**	.003	.11	**.04**
Father	2.51	2.44	2.57	**.11**	.05	.18	**.06**	2.53	2.47	2.60	.04	−.02	.10	.02
Avoidance														
Global	3.75	3.70	3.79	.00	−.04	.04	.00	3.57	3.52	3.62	−.01	−.05	.03	−.01
Partner	2.67	2.61	2.73	**.26**	.21	.31	**.24**	2.57	2.51	2.63	**.20**	.15	.24	**.20**
Friend	2.59	2.55	2.63	**.10**	.06	.13	**.10**	2.56	2.52	2.60	**.07**	.04	.11	**.08**
Mother	3.66	3.60	3.72	**.24**	.18	.30	**.15**	3.59	3.53	3.65	**.25**	.20	.31	**.16**
Father	4.25	4.19	4.32	**.08**	.02	.15	**.05**	4.25	4.19	4.32	**.09**	.03	.15	**.05**

Note. CI = confidence interval; LB = lower bound; UB = upper bound; the opposite dimension of attachment security was controlled in all analyses; the analyses for mothers and fathers are based only on individuals for whom the parent in question was still alive; the analyses based on partners were based only on individuals who indicated they were in a romantic relationship at the time of assessment. Parameter estimates in **boldface** are statistically significant, $p < .05$.

parents normatively varied as a function of age. In contrast to global-, partner-specific, and friend-specific anxiety, which tended to normatively decline with age, older individuals tended to have *higher* anxiety with respect to both their mothers ($b_L = 0.08$, 95% CI [0.02, 0.14], $\beta_L = 0.05$) and fathers ($b_L = 0.11$, 95% CI [0.05, 0.18], $\beta_L = 0.06$).[7] Although there was a quadratic association between age and anxiety with one's mother in Sample 1 ($b_Q = −0.07$, 95% CI [−0.12, −0.02], $\beta_Q = −0.07$), this effect did not replicate in Sample 2 ($b_Q = −0.01$, 95% CI [−0.06, 0.04], $\beta_Q = −0.01$). As can be seen in the left-hand panels of Fig. 4, these findings are consistent with the notion that concerns about parental availability might intensify with age, leading to a positive association between age and parent-specific anxiety.

Similarly, age was positively associated with avoidance with both mothers ($b_L = 0.24$, 95% CI [0.18, 0.30], $\beta_L = 0.15$) and fathers ($b_L = 0.08$, 95% CI [0.02, 0.15], $\beta_L = 0.05$). Although there was a curvilinear association between age and avoidance with one's mother in Sample 2 ($b_Q = −0.09$, 95% CI [−0.14, −0.03], $\beta_Q = −0.07$), such an effect was not observed in Sample 1 ($b_Q = 0.01$, 95% CI [−0.04, 0.06], $\beta_Q = 0.01$). These findings are in line with theoretical predictions that individuals desire increased inde-

pendence from their parents with age (e.g., Arnett, 2000; Chopik et al., 2013).[8]

4.5. Combined analysis of Samples 1–2

For our final series of analyses, we combined both samples into a single dataset to conduct analyses on the associations between age and attachment working models. The results of these combined analyses are presented in Table 4. The pattern of results was quite similar to those observed in both individual samples. However, the boost in statistical power and precision of estimation afforded by combining the samples together revealed some of the smaller quadratic associations more clearly. Specifically, in the combined dataset, declines in global anxiety were curbed by a positive quadratic trend ($b_Q = 0.04$, 95% CI [0.01, 0.08], $\beta_Q = 0.05$), such that the drops in global anxiety were sharpest in early adulthood (see the top-left panel of Fig. 5). Negative quadratic trajectories leveled the normative age-graded gains in avoidance with

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[7] In Sample 2, the association between age and anxiety with father did not reach statistical significance, $b_L = 0.04$, 95% CI [−0.02, 0.10], $\beta_L = 0.02$.

[8] Per our preregistered data analysis plan, we also examined the associations between age and attachment orientations in each relationship, controlling for people's global attachment styles. The parameter estimates from these analyses can be found in the Supplementary materials. Generally, the effect sizes were attenuated, and some of the effects dropped below the threshold for statistical significance (though inconsistently across Samples 1–2).

Table 3
Curvilinear associations between age and attachment working models.

Outcome	Sample 1 Intercept b	95% CI LB	95% CI UB	Age/10 b	95% CI LB	95% CI UB	β	(Age/10)² b	95% CI LB	95% CI UB	β	Sample 2 Intercept b	95% CI LB	95% CI UB	Age/10 b	95% CI LB	95% CI UB	β	(Age/10)² b	95% CI LB	95% CI UB	β
Anxiety																						
Global	4.41	4.32	4.50	**−.14**	−.33	−.16	**−.17**	.05	.00	.09	.06	4.15	4.05	4.25	**−.16**	−.24	−.09	**−.12**	.03	−.02	.07	.03
Partner	3.65	3.53	3.77	**−.26**	−.39	−.14	**−.17**	.02	−.05	.08	.02	3.50	3.38	3.62	**−.24**	−.34	−.13	**−.16**	−.01	−.07	.05	−.01
Friend	2.86	2.78	2.94	**−.14**	−.22	−.07	**−.10**	.02	−.03	.06	.02	2.69	2.61	2.78	**−.11**	−.17	−.04	**−.08**	.03	−.01	.07	.03
Mother	2.32	2.24	2.41	**.16**	.08	.24	**.11**	**−.07**	−.12	−.02	**−.07**	2.22	2.14	2.30	.06	.00	.13	.04	−.01	−.06	.04	−.01
Father	2.57	2.48	2.67	**.17**	.08	.26	**.09**	−.06	−.12	.00	−.05	2.59	2.50	2.69	.06	−.01	.13	.04	−.05	−.11	.01	−.03
Avoidance																						
Global	3.70	3.64	3.77	−.04	−.11	.02	−.04	.03	.00	.07	.06	3.62	3.54	3.69	.02	−.03	.08	.02	−.03	−.07	.00	−.05
Partner	2.70	2.62	2.78	**.29**	.21	.37	**.27**	−.02	−.07	.02	−.04	2.67	2.59	2.74	**.28**	.21	.35	**.28**	**−.07**	−.11	−.03	**−.12**
Friend	2.62	2.56	2.68	**.13**	.08	.19	**.13**	−.03	−.06	.01	−.04	2.63	2.57	2.69	**.12**	.07	.17	**.13**	**−.04**	−.07	−.01	**−.07**
Mother	3.65	3.56	3.73	**.23**	.15	.32	**.15**	.01	−.04	.06	.01	3.71	3.61	3.80	**.32**	.25	.38	**.20**	**−.09**	−.14	−.03	**−.07**
Father	4.25	4.16	4.35	.09	.00	.17	.05	.00	−.06	.06	.00	4.31	4.22	4.41	**.12**	.05	.19	**.07**	−.05	−.11	.01	−.03

Note. CI = confidence interval; LB = lower bound; UB = upper bound; the opposite dimension of attachment security was controlled in all analyses; the analyses for mothers and fathers are based only on individuals for whom the parent in question was still alive; the analyses based on partners were based only on individuals who indicated they were in a romantic relationship at the time of assessment. Parameter estimates in **boldface** are statistically significant, p < .05.

respect to romantic partners ($b_Q = -0.05$, 95% CI [−0.08, −0.02], $\beta_Q = -0.08$) and best friends ($b_Q = -0.03$, 95% CI [−0.06, −0.01], $\beta_Q = -0.06$). Finally, curvilinear coefficients buffered the normative increases in mother-specific anxiety ($b_Q = -0.03$, 95% CI [−0.07, −0.00], $\beta_Q = -0.03$) and father-specific anxiety ($b_Q = -0.06$, 95% CI [−0.10, −0.02], $\beta_Q = -0.04$), such that anxiety with respect to one's parents tended to plateau in middle adulthood (see the bottom-left panels of Fig. 5). Collectively, these curvilinear coefficients appear to represent a slight curtailing of the linear trends in middle-to-old age for some relational domains.

5. Discussion

Previous research has found that, compared to younger people, older individuals tend to report lower levels of *general-romantic* (i.e., ECR, ECR-R) attachment anxiety and higher levels of general-romantic avoidance (e.g., Birnbaum, 2007; Chopik & Edelstein, 2014; Chopik et al., 2013; Diehl et al., 1998; Klohnen & John, 1998; Mickelson et al., 1997; Segal et al., 2009). The present study extended this work by examining cross-sectional normative developmental patterns in people's *global* attachment working models as well as their *relationship-specific* attachment with their romantic partners, best friends, mothers, and fathers. As compared with general-romantic attachment (typically measured via the ECR or ECR-R), global attachment is broader construct that captures people's general feelings pertaining to close relationships. In contrast, relationship-specific measures tap people's feelings about *specific individuals* in their lives, and are more granular than the ECR, which taps people's feelings about romantic relationships in general (see Fig. 1).

5.1. Global working models

We first examined individuals' attachment working models— beliefs and expectations—regarding close relationships globally. We found that older individuals tended to report lower levels of global attachment anxiety than did younger individuals. In contrast, there was little association between age and global avoidance. That is, older people were no more or less likely to be avoidant than younger persons. This pattern is noteworthy, because as noted below, there were positive correlations between age and avoidance in every specific relationship domain assessed (partner, best friend, mother, father). Nevertheless, older people did not indicate greater avoidance with close others *in general*, as compared with younger individuals. What might give rise to this pattern? Researchers in related fields have observed that global assessments (e.g., of well-being) can be constructed in a bottom-up fashion (e.g., aggregating across all information relevant to one's well-being to form an overall assessment) or in a top-down fashion (e.g., relying on heuristics and intuitions about how happy one is) (e.g., Heller et al., 2004; Lucas & Diener, 2008). To the extent that individuals rely on top-down assessments of their global attachment avoidance (rather than bottom-up ones), it is possible for their perceptions of their global avoidance (an intuitive *feeling* toward relationships) to remain constant, despite the fact that their levels of avoidance in each specific relationship in their lives have changed. Of course, this explanation is ultimately speculative and should be tested in future research. For example, one implication of individuals relying on top-down assessments of global avoidance is that people's ratings of their global avoidance should be more stable over time than should their ratings of their attachment security with respect to specific individuals.
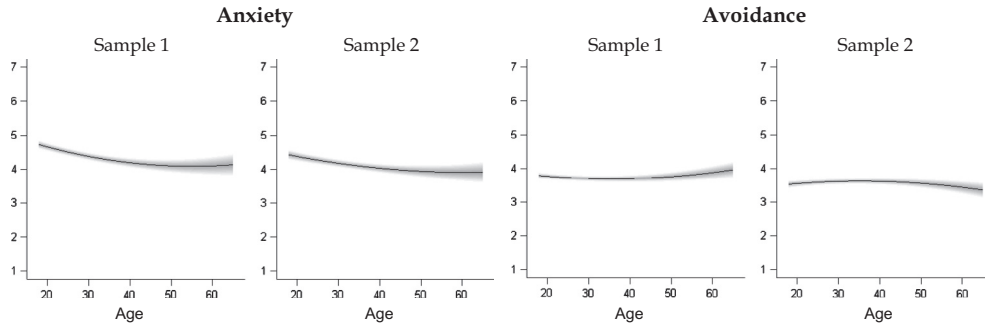
Fig. 2. Model-predicted quadratic associations between age and global attachment working models, with 95% confidence bands shaded. In the anxiety graphs, only the linear trends were statistically significant. There were no statistically significant links between age and global avoidance.
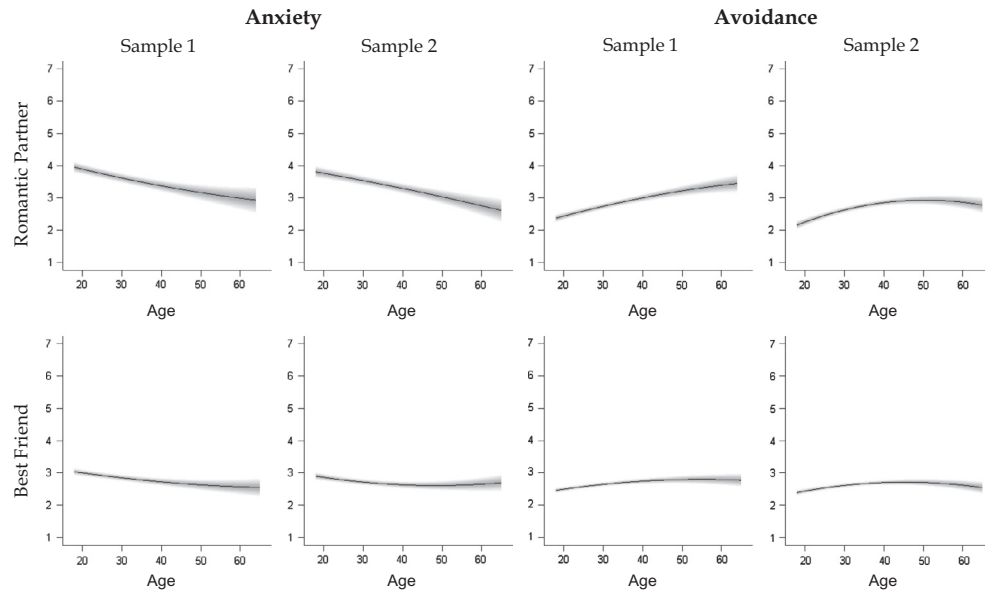
Fig. 3. Model-predicted quadratic associations between age and attachment to romantic partners and best friends, with 95% confidence bands shaded. Partner-specific avoidance and friend-specific avoidance in Sample 2 exhibited statistically significant quadratic associations. The remaining graphs represent only linear effects.
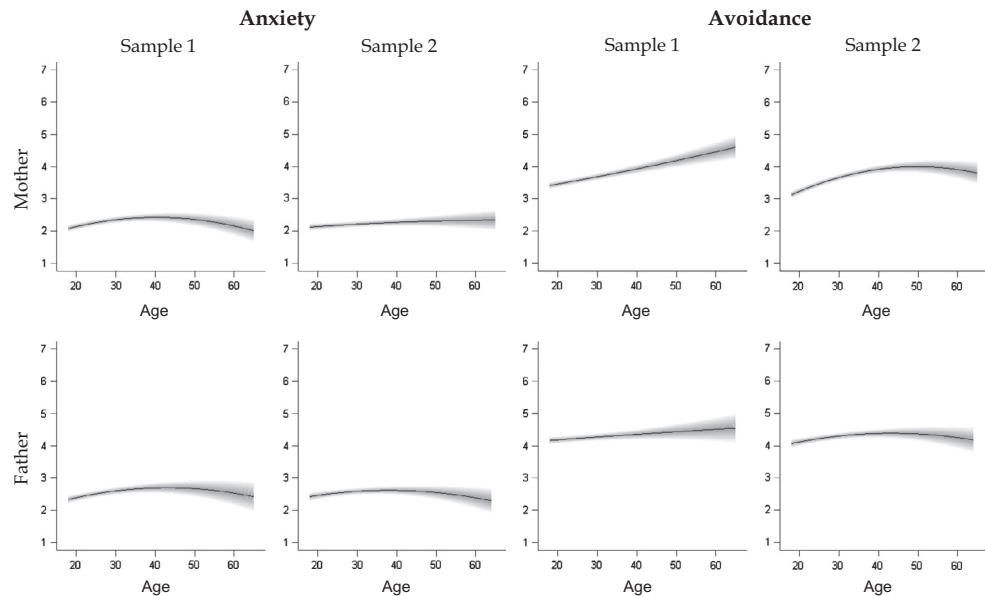
Fig. 4. Model-predicted quadratic associations between age and attachment to parents, with 95% confidence bands shaded. Mother-specific anxiety in Sample 1 and mother-specific avoidance in Sample 2 exhibited statistically significant quadratic trends. The remaining trends were linear—except father-specific anxiety in Sample 1, which was unrelated to age.

Table 4
Curvilinear age trajectories in Samples 1–2 combined.

Outcome	Intercept			Age/10				(Age/10)^2			
		95% CI			95% CI				95% CI		
	b	LB	UB	b	LB	UB	β	b	LB	UB	β
Anxiety											
Global	4.27	4.21	4.34	**−.22**	−.28	−.16	**−.16**	**.04**	.01	.08	**.05**
Partner	3.58	3.50	3.67	**−.25**	−.33	−.17	**−.17**	.00	−.04	.04	.00
Friend	2.78	2.72	2.83	**−.14**	−.18	−.09	**−.10**	.03	.00	.06	.03
Mother	2.27	2.21	2.33	**.11**	.06	.16	**.07**	**−.03**	−.07	−.00	**−.03**
Father	2.59	2.52	2.66	**.12**	.06	.17	**.07**	**−.06**	−.10	−.02	**−.04**
Avoidance											
Global	3.66	3.61	3.70	−.01	−.06	.03	−.01	.00	−.02	.03	.01
Partner	2.68	2.62	2.74	**.28**	.23	.34	**.28**	**−.05**	−.08	−.02	**−.08**
Friend	2.62	2.58	2.67	**.13**	.09	.16	**.13**	**−.03**	−.06	−.01	**−.06**
Mother	3.66	3.60	3.73	**.27**	.22	.32	**.17**	−.03	−.07	.01	−.03
Father	4.28	4.21	4.35	**.10**	.04	.15	**.06**	−.02	−.06	.02	−.02

Note: CI = confidence interval; LB = lower bound; UB = upper bound; the opposite dimension of attachment security was controlled in all analyses; the analyses for mothers and fathers are based only on individuals for whom the parent in question was still alive; the analyses based on partners were based only on individuals who indicated they were in a romantic relationship at the time of assessment. Parameter estimates in **boldface** are statistically significant, $p < .05$.

5.2. Partner-specific working models

In line with previous research that has examined general romantic attachment working models (e.g., Birnbaum, 2007; Chopik & Edelstein, 2014; Chopik et al., 2013; Diehl et al., 1998; Klohnen & John, 1998; Mickelson et al., 1997; Segal et al., 2009), we found that older individuals tended to report lower levels of partner-specific anxiety than did younger individuals. There are several overlapping theoretical explanations for why such trends were observed. First, a large body of literature suggests that as people mature, they tend to experience decreases in negative affectivity (e.g., Roberts & Mroczek, 2008). Normative declines in partner-specific attachment anxiety may simply reflect that older individuals experience fewer negative emotions than do younger individuals, including worries about abandonment by close others. Beyond this, several studies have documented that the initiation and maintenance of romantic relationships is associated with a variety of emotional benefits, including decreases in attachment anxiety (Eastwick & Finkel, 2008) and increases in emotional stability and self-esteem (Lehnart et al., 2010). As such, it is possible that experiences of being loved, valued, and not forsaken in romantic relationships across the lifespan fosters normative decreases partner-specific anxiety over time. Notably, because adults' primary attachment relationships tend to be with their romantic partners (Doherty & Feeney, 2004; Hazan & Zeifman, 1994), this line of reasoning may also partially explain why older individuals reported lower levels of *global* attachment anxiety, as well.

Also aligning with previous research (e.g., Birnbaum, 2007; Chopik & Edelstein, 2014; Chopik et al., 2013; Diehl et al., 1998; Klohnen & John, 1998; Mickelson et al., 1997; Segal et al., 2009), people's partner-specific attachment avoidance tended to increase with age. This may reflect a process whereby transitioning into the role of a generative caretaker for dependents affords lesser ability to invest in other types of relationships—including with one's romantic partner (Erikson, 1968, 1974). Alternatively, as people age, natural declines in satisfaction and passionate intimacy in their romantic relationships may potentially manifest as increased avoidance (Wojciszke, 2002; cf. Acevedo & Aron, 2009).

Taken together with the global findings, the partner-specific findings may help clarify Chopik et al.'s (2013) observation that general-romantic (ECR-R) attachment avoidance changes more rapidly on average across the lifespan for *partnered* individuals than it does for *single* individuals. Specifically, assessments of more general romantic working models (e.g., the ECR-R) are likely an amalgam of global attachment working models as well as partner-specific

working models. Individuals who are not partnered must necessarily rely on global working models, rather than partner-specific ones when answering questions about their general romantic attachment orientations. In contrast, partnered persons' perceptions of their global romantic security are likely heavily influenced by their current romantic relationships (Klohnen, Weller, Lou, & Choe, 2005).[9] As such, the fact that general romantic avoidance normatively changes at a faster rate for partnered persons vs. single ones (Chopik et al., 2013) may simply reflect that, when answering questions about general romantic attachment, people with partners rely more upon their partner-specific avoidance (which our study suggests increases with age), whereas single individuals must rely more on global avoidance (which our study suggests does not change with age).

5.3. Parent- and friend-specific working models

We found that older individuals tended to report higher levels of *both* anxiety and avoidance with respect to their mothers and fathers than did younger persons. This possibility was anticipated by Chopik et al. (2013), who argued that in young adulthood, desires for independence (Erikson, 1968) as well as an increasing emphasis on peer relationships rather than parental ones (e.g., Fraley & Davis, 1997) might lead to normative increases in parent-specific avoidance. Similarly, normative increases in parent-specific anxiety in young adulthood may result from concerns about losing parental support as an individual begins to transition into roles characterized by increasing independence. In middle adulthood, fears about parental mortality and availability may explain why parent-specific anxiety continues to increase.

Finally, we found that older individuals tended to report lower levels of anxiety and higher levels of avoidance with their best friends than did younger persons. Notably, these age trajectories were similar to—albeit much smaller in magnitude than—those

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[9] Once again, data from one unrelated study can provide some insight into this issue (see Footnote [1]). In one sample of 226 college students, students' relationship status (single vs. dating) moderated the correlations between romantic (ECR) attachment, global attachment, and partner-specific attachment. Specifically, the association between romantic (ECR) and partner-specific attachment was higher for persons who were dating (simple βs = .76, .85) than it was for single individuals (simple βs = .65, .65), interaction βs = .11, .20. Conversely, the association between *global* and romantic (ECR) attachment was slightly *lower* for people who were dating (simple βs = .12, −.05) than for single individuals (simple βs = .16, .07), interaction βs = −.04, −.12. These interactions support the notion that, compared to partnered individuals, single persons must rely relatively more upon global models and relatively less upon partner-specific ones when answering questions about their general romantic attachment styles.
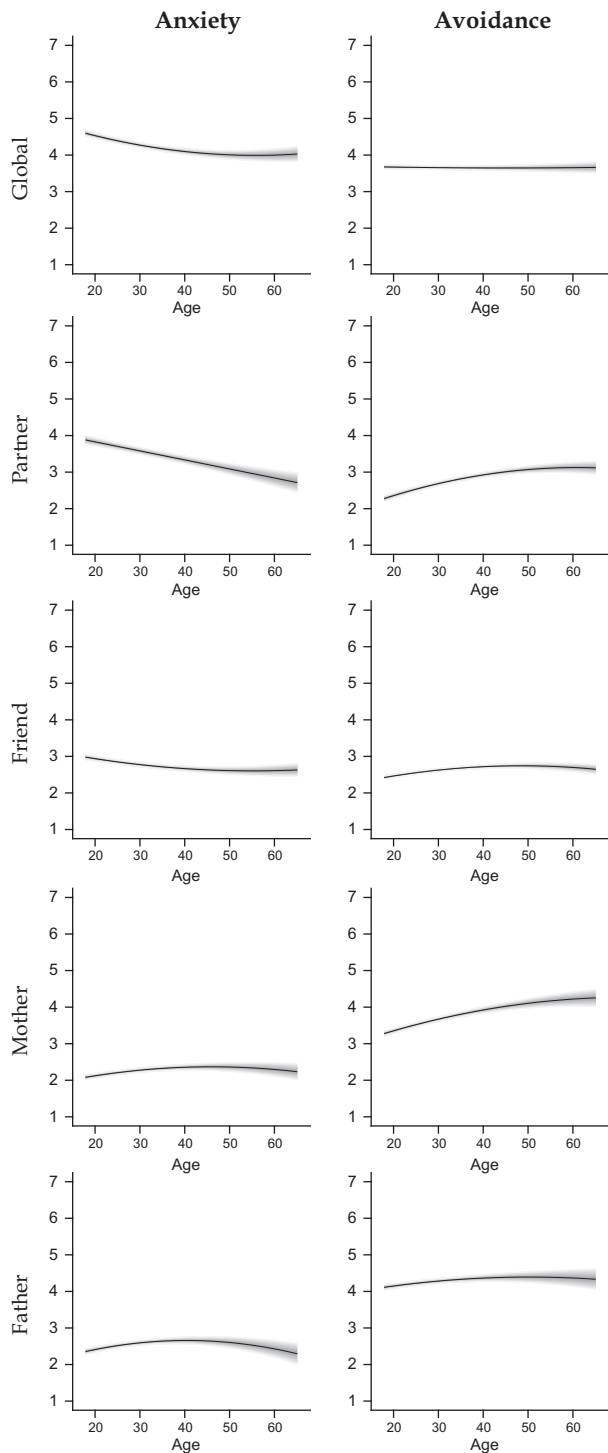
Fig. 5. Model-predicted quadratic associations between age and attachment in the combined sample, with 95% confidence bands shaded. The quadratic trends for (1) global anxiety, (2) partner-specific avoidance, (3) friend-specific avoidance, (4) mother-specific anxiety, and (5) father-specific anxiety were statistically significant. The remaining graphs depict statistically significant linear trends only.

found for partner-specific attachment working models. As such, these findings may reflect that people become generally less anxious and more avoidant with their *peers* in general as they age.

5.4. Implications, limitations, and future directions

One implication of the present study is that people's working models with respect to different relational targets (e.g., romantic,

parental) appear to follow different developmental trajectories over the life course. These findings indicate that, in order to understand the attachment system across the lifespan, it is necessary to examine people's attachment working models at various levels of specificity—globally, with respect to classes of individuals (e.g., romantic, parental, peers) (Sibley & Overall, 2008, 2010), and with respect to specific relationships (e.g., one's *current* partner) (Fraley et al., 2011). Moreover, our findings may suggest that normative development in attachment over the lifespan is organized in terms of two broad categories: *parents vs. peers*. For example, as compared with young adults, middle-age and older adults in our samples tended to experience *higher* anxiety with parents, but *lower* anxiety with peers (romantic partners, best friends). However, one limitation of the present study is that we did not sample a wide range of peer relationships. As such, there may be other important organizing or moderating factors that influence normative development in attachment to peers over the lifespan (Hartup & Stevens, 1999). Future research should sample across attachment in a wide gamut of peer relationships throughout the lifespan to examine this possibility. To this end, it may be particularly fruitful for future research to examine age trends in people's attachment toward their *siblings* (Fraley & Tancredy, 2012; Tancredy & Fraley, 2006). Such data would provide insight into whether the development of attachment orientations is governed by the parental vs. peer divide, or whether other types of factors (e.g., family of origin vs. chosen associates) moderate the association between age and attachment styles.[10]

Along these lines, future research should more thoroughly examine people's attachment bonds with their best friends. Specifically, it may be the case that best friendships vary—not only in degree—but also in kind across individuals. As such, any number of factors might influence, first, whether people even have an attachment bond with their best friends (characterized by attachment behaviors such as proximity seeking, secure base, safe haven; Bowlby, 1969; Hazan & Zeifman, 1994; Saferstein, Neimeyer, & Hagans, 2005), and second, how those attachment bonds normatively develop over time.

A second implication of the present research is that our patterns of findings seem to best align with theories of personality development that emphasize the role of environmental experiences and interpersonal dynamics in sculpting people's traits over time (e.g., Roberts & Wood, 2006). Specifically, it seems difficult to imagine how factors such as genetically programmed maturation (Costa & McCrae, 2006) might lead to normative increases in anxiety with respect to one's parents, yet educe normative decreases in partner-specific anxiety. In contrast, such a pattern of findings is parsimoniously reconciled by perspectives that emphasize the importance of within-relationship experiences as a prominent source of personality development (e.g., Reitz, Zimmermann, Hutteman, Specht, & Neyer, 2014). Indeed, it seems to follow logically that, if individuals become less anxious over the course of a romantic relationship (Eastwick & Finkel, 2008) and most people enter into enduring romantic relationships throughout adulthood, then the natural result would be normative declines in partner-specific anxiety with age. Nevertheless, our cross-sectional design does not allow us to soundly differentiate whether the observed age-trajectories are due to commonly shared experiences, including normative relational influences, or are rather caused by other shared factors, such as biological maturation (Specht et al., 2014). Consequently, future research should more directly evaluate these

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[10] Tancredy and Fraley (2006) examined age-related differences in the extent to which people used their siblings as attachment figures. They found that older adults tend to be less likely than younger adults to use their siblings as attachment figures—a pattern that was similar to those observed for attachment to parents, but not romantic partners.

ideas by comparing, for example, developmental trajectories in attachment anxiety among those who successfully commit to romantic relationships and those who remain single over an extended period of time (see Lehnart et al., 2010).

A third limitation of the present research is that we did not measure theoretical mechanisms that might drive the correlations between age and attachment working models. For example, we reasoned that investment in caregiving relationships (e.g., with children) might necessitate withdrawing resources (including perhaps intimacy) from other relationships, resulting in increased avoidance. Similarly, we argued that normative declines in passionate love in romantic relationships (e.g., Wojciszke, 2002) might drive increases in avoidance. These theoretical mechanisms—and others—should be directly tested in future studies.

One final—and substantial—limitation of the present study is that the data reported are cross-sectional. As a consequence, it is difficult to discern whether the observed developmental trajectories are attributable to confounds such as *cohort effects*, or whether they represent true *developmental* patterns. At least with respect to general-romantic attachment working models, similar cross-sectional age trajectories have been observed in more than 80 countries (Chopik & Edelstein, 2014), as well as in at least one longitudinal study (Klohnen & John, 1998). Collectively, these findings may suggest that the observed cross-sectional developmental trends are more than just incidental, and may partially represent true developmental processes. Nevertheless, more research—especially multi-decade longitudinal studies—is needed to fully understand how global, general-romantic, and relationship-specific working models develop throughout the life course.

5.5. Conclusion

Researchers have argued that it is important to understand how people's attachment orientations develop over the lifespan (Chopik & Edelstein, 2014; e.g., Chopik et al., 2013; Magai, 2008)—partially because attachment working models have numerous implications for understanding a wide array of phenomena in adulthood, ranging from relational functioning and wellbeing (see Mikulincer & Shaver, 2007) to cognitive abilities, including memory and perception (e.g., Collins, 2006; Fraley & Brumbaugh, 2007). The present study suggests that people's attachment working models in different relational contexts (e.g., parental, peer, romantic) follow different normative developmental trajectories over adulthood. These findings underscore the importance of examining attachment security—and how it changes—across a wide gamut of global and specific relational contexts.

Appendix A. Supplementary material

Supplementary data associated with this article can be found, in the online version, at http://dx.doi.org/10.1016/j.jrp.2015.10.001.

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