

Canadian Journal of Behavioural Science/Revue canadienne des sciences du comportement

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Online First Publication, June 11, 2012. doi: 10.1037/a0028013

CITATION

Caron, A., Lafontaine, M.-F., Bureau, J.-F., Levesque, C., & Johnson, S. M. (2012, June 11). Comparisons of Close Relationships: An Evaluation of Relationship Quality and Patterns of Attachment to Parents, Friends, and Romantic Partners in Young Adults. *Canadian Journal of Behavioural Science/Revue canadienne des sciences du comportement*. Advance online publication. doi: 10.1037/a0028013

Comparisons of Close Relationships: An Evaluation of Relationship Quality and Patterns of Attachment to Parents, Friends, and Romantic Partners in Young Adults

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Two theoretical models of attachment have been proposed. The trait model conceptualizes attachment as a general personality characteristic of an individual, whereas the context model conceptualizes attachments as relationship-specific. Participant-parent relationship quality, attachment patterns in relationships to friends, and attachment patterns in relationships to romantic partners were examined to determine whether participants experience one general, trait-like attachment orientation or whether attachment patterns are context-specific. A sample of 2,214 young adults (76% female) aged between 17 and 25 years was recruited for participation from psychology courses offered at their university of study. Students completed a survey package including five self-report measures evaluating relational dimensions in relationships to parents, friends, and romantic partners, in addition to one self-report measure of psychological well-being. Participants in couple relationships also completed two self-report measures of dyadic well-being. Results from exploratory and confirmatory factor analyses support the conceptualization of attachment patterns as context-specific variables because findings revealed distinctions between attachment patterns/quality of relationship to parents, friends, and romantic partners. Results from regression analyses suggest that such relationships contribute differently to participants' psychological well-being and dyadic functioning.

Keywords: young adult attachment, trait model, context-specific model, psychological well-being, dyadic functioning

In the study of attachment, a fundamental question posed by researchers is whether to conceptualize attachment as a trait-like characteristic of an individual's personality or whether it should be considered a context-specific variable dependent on relationship (Baldwin, Keelan, Fehr, Enns, & Koh-Rangarajoo, 1996; Bartholomew, 1993; Cozzarelli, Hoekstra, & Bylsma, 2000). Following the seminal work conducted by Hazan and Shaver (1987), attachment research has expanded to include a growing interest in studies focusing not only on children's experiences of attachment but (also) on attachment in adult relationships (Bartholomew, 1993). Since the development of the study of adult attachment, theorists have attempted to determine the nature of individuals' attachments in different relationship types, considering attachment in terms of either a person-specific variable or a relationship-specific variable (Lewis, 1994). During attachment theory's early years of development, and present still in attachment literature, is the concept of attachment being relation-specific in the first years of life but transforming into a relatively stable trait-like characteristic during childhood (Bowlby, 1969/1982; 1973; Bretherton & Munholland, 2008; Thompson & Raikes, 2003). However, some

researchers acknowledge that attachment in adulthood may not be a person-specific variable, as proposed in Bowlby's seminal work, but that people may have multiple mental models of their attachment patterns that may vary in degrees of specificity (Cozzarelli et al., 2000).

To develop accurate insight into the nature of individuals' attachment patterns in terms of person- or relationship-specific variables, research examining people's experiences of attachment and relationship quality in different relationship types is needed. Researchers have noted that few studies have examined attachment patterns in multiple relationship types (e.g., in relationships with parents, friends, and romantic partners) (Furman, Simon, Shaffer, & Bouchey, 2002). In addition, although it is well-established that attachment bonds shared with parents (Hammen et al., 1995), friends (Daley & Hammen, 2002), and romantic partners (Kafetsios & Sideridis, 2006) function as contributors to well-being and dyadic functioning in young adults, few studies have focused on examining the relative contributions of multiple relationship types to personal and interpersonal well-being (Meeus, Branje, van der Valk, & de Wied, 2007). In line with these considerations, the present study seeks to examine links among participant-parent relationship quality, attachments to friends, and attachment to romantic partners to gain insight into whether young adults experience a trait-like attachment or whether attachments are context-specific. Moreover, this study also aims to explore the relative contributions of these three types of relationships to the prediction of psychological well-being and dyadic functioning.

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Overview of Attachment Theory

Bowlby's work (1969/1982, 1973, 1980) describes the development and functioning of an innate attachment system designed to keep infants in close proximity to their caregivers under stressful or threatening conditions. Relationships with caregivers influence the development of children's mental model of the self, which refers to perceptions of the self as either worthy or unworthy of love and affection. Children's mental model of others, which refers to perceptions of the accessibility and responsiveness of others, is also shaped by early experiences with caregivers. Bowlby's theory stipulates that attachments established in parent-child relationships will determine the quality of relationships developed in adulthood (Bartholomew, 1993). Drawing from Bowlby's theory, Hazan and Shaver (1987) are credited with expanding attachment literature to include research focusing on adult attachment processes because they proposed that attachment processes governing attachment to caretakers in infancy should also direct individuals' thoughts and emotions regarding particular others in adulthood.

Attachment as a General or Context-Specific Variable

Past research findings have lent support to the trait model of attachment, indicating that attachment patterns to parents developed in infancy are related to the quality of children's attachments to friends in subsequent years (e.g., Schneider, Atkinson, & Tardif, 2001; Sroufe, 1983). The quality of parent-child relationships has been found to hold predictive value for dimensions of adjustment and well-being later in life (see Bureau, Martin, & Lyons-Ruth, 2010 for a review). This model is moderately supported by correlations between self-report measures of adult attachment patterns and retrospective accounts of relationships to parents in childhood (Collins & Read, 1990; Hazan & Shaver, 1987).

Despite lending support to the trait model of attachment, previous work does not provide convincing evidence of continuity of attachment patterns across specific relationship types, and in many cases reported associations are weak (Baldwin & Fehr, 1995; Bartholomew, 1993). As such, researchers have begun to express unease at conceptualizing attachment in terms of a personality trait. Some theorize that individuals may hold numerous mental models of attachment developed by engaging in various types of relationships (Kobak, 1994; Lewis, 1994).

Very little research has focused specifically on examining whether individuals experience trait-like or context-specific attachment patterns, aside from a few studies. Trinke and Bartholomew (1997) have found that young adults often have more than five attachment figures, including friends, parents, and romantic partners. In a comparison of general and relationship-specific models of attachment, Cozzarelli and colleagues (2000) found that conceptualizing attachment as a personality trait obscures much of the variability across relationship types and that a context-specific model may be more appropriate. Likewise, Ross and Spinner (2001) have reported that attachment ratings measured across different relationship types are not congruent with one another. In another study, Imamoğlu and Imamoğlu (2006) compared links among attachment patterns to parents, friends, and romantic partners in young adults and reported that the degree to which individuals felt secure or insecure in their relationships was related to experiences exclusive to that relationship. Furman and

colleagues (2002), and Berlin and Cassidy (1999) have proposed that security of attachments to parents are related to quality of friendships, whereas romantic relationships should be different from relationships to parents. Furman (1999) and Shaver, Belsky, and Brennan (2000) have found that attachment patterns to romantic partners are not congruent with those experienced toward parents. Little attention has been paid to examining possible links between attachments to friends and romantic partners, although Furman and colleagues have argued that experiences in friendships affect mental models of romantic relationships because friendships lay the foundation for important principles of romantic relationships, such as compromise and reciprocity (Furman, 1999; Furman & Wehner, 1994).

Attachment Bonds as Contributors to Well-Being

An impressive body of research serves as testimony to the relationship between attachments to parents, friends, and romantic partners and psychological well-being and dyadic functioning (e.g., Dozier, Stovall-McClough, & Albus, 2008; George & West, 1999; Kafetsios & Sideridis, 2006). Findings suggest that individuals reporting insecure attachments to parents, friends, and romantic partners experience lower self-esteem and emotional well-being, score lower on measures of self-perceived strengths (Bureau, Easterbrooks, & Lyons-Ruth, 2009; Raja, McGee, & Stanton, 1992), are less adjusted on measures of well-being such as loneliness and stress (Hazan & Shaver, 1990), and experience more problems in conflict management and less positive communication in couple relationships (Brassard, Shaver, & Lussier, 2007; Lafontaine, Bélanger, & Gagnon, 2009; Mikulincer & Shaver, 2007). Furthermore, literature on dyadic functioning provides evidence that insecure romantic attachment patterns are related to greater distress in dyadic relationships (see Mikulincer & Shaver, 2007, for a review). As such, it has been established that attachments in close relationships are related to well-being and dyadic functioning, although few studies have examined the respective contributions of multiple relationship types in the prediction of psychological well-being and dyadic functioning (Meeus et al., 2007).

Contributions of the Present Study

Although a limited number of studies have examined context-specific versus trait models of attachment, very little research has actually investigated how attachment bonds in fundamentally crucial young adult relationships (i.e., relationships to parents, friends, and romantic partners) may provide insight into which model may best conceptualize the nature of young adult attachment. Moreover, no studies to date have examined how constructs underlying attachment patterns in multiple relationship types (e.g., anxiety in friend and romantic relationships) may provide differential contributions to psychological and dyadic well-being. Despite the very restricted body of research examining the trait and context models of attachment, existing literature ascertains that reviewing and challenging the accuracy of theoretical models is of noteworthy importance and that much attention should be paid to theory testing (Viswesvaran & Ones, 1995). Additionally, it is encouraged that theory testing be conducted with large sample sizes (Tabachnick & Fidell, 2007) and across different populations (van

Ijzendoorn & Sagi-Schwartz, 2008). In this vein, there is much value in testing models that conceptualize attachment experiences, and moreover, to examine such relationship bonds with large sample sizes and diverse populations. In light of these considerations, the present study examines attachment experiences in multiple relationship types to determine if the associated outcomes fit best with predictions emerging from literature on the trait model of attachment or literature on the context-specific model of attachment. Moreover, the present study conducts such investigations by using an unprecedented sample size ($N = 2,214$) consisting entirely of Canadian individuals.

Objectives and Hypotheses of Present Study

The primary objective of the present study was to investigate participant-parent relationship quality and attachment patterns in relationships to friends and romantic partners to examine two competing models of attachment: attachment as a personality trait and attachments as context-specific variables. An exploratory factor analysis (EFA) was conducted to evaluate whether participants reported experiencing one trait-like attachment orientation (as indicated by responses to the self-report questionnaires evaluating relational dimensions in the three relationship types clustering onto one factor) or whether participants reported different attachment patterns across the three different relationship types examined (as indicated by responses to the self-report questionnaires separating onto four different factors). A confirmatory factor analysis (CFA) was then conducted to verify the observed factor structure. On the basis of the literature reviewed, it was hypothesized that the findings of this study would complement the context model of attachment, thus demonstrating one factor representing attachment to friends, one factor representing attachment to romantic partners, one factor representing participant-parent relationship quality (encompassing relationship security/insecurity), and one factor representing unresolved issues toward parents (encompassing relationship organization/disorganization) for a total of four identifiable factors. It was expected that such a multiple-factor solution would be revealed by the CFA as a more befitting model than a single-factor solution.

Second, the present study sought to explore the respective contributions of attachment patterns to parents and romantic partners and participant-parent relationship quality in the prediction of psychological well-being and dyadic functioning. It was hypothesized that romantic attachments would provide the greatest contribution to dimensions of dyadic functioning measured in the present study (i.e., couple satisfaction, communication problems, and conflict management). According to previous studies that support the context-model of attachment, individuals hold unique perceptions regarding different relationship types; therefore, romantic attachments should influence dyadic functioning more heavily than should attachment patterns held in other relationship types. Finally, it was hypothesized that participant-parent relationship quality would provide the greatest contribution in the prediction of psychological well-being because such relationships have usually been established before the development of friend or romantic relationships during critical developmental periods of self-esteem and social adjustment (Armsden & Greenberg, 1987; Paterson, Pryor, & Field, 1995).

Methods

Participants

Students enrolled at a Canadian university were invited to participate in this study. A sample of 2,214 individuals between the ages 17 and 25 years participated, including 525 men, 1,683 women, and 6 others who did not disclose their sex. The mean age of participants was 19.36 years ($SD = 1.51$). Of the sample, 76% of participants identified themselves as English-speaking and 24% as French-speaking. Forty-three percent (43%) of participants were involved in a romantic relationship and reported an average relationship duration of 1.37 years ($SD = 1.39$).

Procedure

Participants voluntarily registered for the study and were provided access to its contents through a secure Web-based service. The survey package opened with an information letter outlining the voluntary nature of the study and participants' right to withdraw at any time without consequence. Subsequent pages provided participants with necessary instructions and a five-digit identification code used to ensure their complete anonymity. After completion, students were provided with two credit points toward their final grade as compensation.

Measures

All instruments used in the present study have been demonstrated to be psychometrically supported measures of attachment and relationship quality and are considered suitable for use with young adults and French-speaking persons. For all instruments, higher-scale scores denote greater levels of the construct measured. Moreover, reliability statistics performed for the instruments used in the present study all demonstrate adequate to excellent-scale score reliability coefficients (see Table 1).

Indices of attachment. The Relationship Questionnaire (RQ; Bartholomew & Horowitz, 1991; validated for use with young adults by Bartholomew & Horowitz, 1991 and translated from English to French by Lussier, 1992) is a widely used measure of attachment that can be adjusted to measure general attachment patterns in close relationships as well as attachments in specific relationships. In the present study, participants were administered adaptations of the RQ that measure attachment to friends and attachment to romantic partners. The RQ contains four paragraphs, each describing a pattern of attachment: secure, preoccupied, fearful, and dismissing. Using a seven-point Likert-type response format, with responses ranging from 1 (*not at all like me*) to 7 (*very much like me*), participants evaluated the degree to which each proposed type of relationship reflected their own attachment orientation. Ratings for the four attachment patterns have demonstrated moderate stability over an 8-month test-retest period (Scharfe & Bartholomew, 1994).

The Experiences in Close Relationships (ECR) questionnaire (Brennan, Clark, & Shaver, 1998; validated for use with young adults by Brennan et al., 1998 and translated from English to French by Lafontaine & Lussier, 2003) is a 36-item measure of romantic attachment used to measure two dimensions: anxiety over abandonment and avoidance of intimacy. Each subscale includes 18 items that use a seven-point Likert-type response format,

Table 1
Descriptive Statistics and Scale Score Reliability Coefficients for Questionnaire Subscales

Subscales	Men		Women		<i>F</i> Ratio from ANOVA	Cronbach's α	95% CI Cronbach's α	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			Lower	Upper
Participant-Parent Relationship Quality								
IPPA parent trust [10–50]	39.23	7.44	40.21	7.67	$F(1, 2206) = 6.69^{**}$	.92	.91	.92
IPPA parent communication [10–50]	33.52	7.88	36.12	8.59	$F(1, 2206) = 38.09^{***}$	.91	.90	.91
IPPA parent alienation [8–40]	18.14	6.01	17.74	6.55	$F(1, 2206) = 1.52$	.87	.86	.87
PBI maternal care [12–48]	40.06	7.10	41.12	7.15	$F(1, 2206) = 8.91^{**}$	.92	.91	.93
PBI maternal overprotection [13–52]	28.45	6.92	27.72	7.06	$F(1, 2206) = 4.35^*$	.84	.83	.85
PBI paternal care [12–48]	36.86	7.54	37.79	8.33	$F(1, 2206) = 5.20^*$	.92	.92	.93
PBI paternal overprotection [13–52]	25.11	7.15	26.26	6.98	$F(1, 2206) = 10.66^{***}$	.84	.83	.85
AUAQ failed protection [4–20]	8.16	3.73	7.59	3.78	$F(1, 2206) = 9.20^{**}$	.89	.89	.90
AUAQ anger [3–15]	6.35	2.77	6.43	2.83	$F(1, 2206) = .28$	.81	.79	.82
AUAQ fear [3–15]	5.55	3.09	5.24	2.95	$F(1, 2206) = 4.45^*$	.81	.79	.82
Attachment to Friends								
IPPA peer trust [10–50]	39.53	7.54	42.22	6.93	$F(1, 2206) = 57.43^{***}$	.72	.71	.74
IPPA peer communication [8–40]	28.03	6.26	31.81	5.94	$F(1, 2206) = 157.54^{***}$	.91	.91	.92
IPPA peer alienation [7–35]	16.56	4.45	16.28	4.44	$F(1, 2206) = 1.58$	.94	.93	.94
RQ friend secure [1–7]	4.51	1.82	4.90	1.73	$F(1, 2206) = 19.73^{***}$	—	—	—
RQ friend fearful [1–7]	2.73	1.65	2.83	1.82	$F(1, 2206) = 1.11$	—	—	—
RQ friend dismissing [1–7]	3.77	1.63	3.24	1.68	$F(1, 2206) = 40.63^{***}$	—	—	—
RQ friend preoccupied [1–7]	2.69	1.56	2.72	1.67	$F(1, 2206) = .12$	—	—	—
Attachment to Romantic Partner								
ECR anxiety [1–7]	3.35	1.10	3.44	1.16	$F(1, 2206) = 2.83$	.93	.92	.93
ECR avoidance [1–7]	3.14	1.01	2.95	1.19	$F(1, 2206) = 10.29^{***}$	.94	.93	.94
RQ couple secure [1–7]	4.48	1.73	4.49	1.89	$F(1, 2206) = .02$	—	—	—
RQ couple fearful [1–7]	3.05	1.80	3.41	1.96	$F(1, 2206) = 13.79^{***}$	—	—	—
RQ couple dismissing [1–7]	3.39	1.72	3.38	1.77	$F(1, 2206) = .00$	—	—	—
RQ couple preoccupied [1–7]	3.12	1.73	2.82	1.71	$F(1, 2206) = 12.45^{***}$	—	—	—
Psychological Well-Being								
OQ distress [0–88]	26.04	13.83	30.08	14.41	$F(1, 2206) = 32.02^{***}$	.92	.92	.93
OQ relation [0–44]	12.40	6.55	11.42	6.44	$F(1, 2206) = 9.18^{**}$	.80	.78	.81
OQ role [0–36]	11.39	4.56	11.95	4.24	$F(1, 2206) = 6.81^{**}$	.66	.63	.68
Dyadic Functioning								
PRP communication [1–4]	1.95	.50	1.88	.41	$F(1, 944) = 4.26^*$	.67	.64	.70
PRP conflict [1–4]	2.00	.50	1.90	.49	$F(1, 944) = 6.10^*$	.79	.77	.81
DAS satisfaction [0–21]	16.20	3.25	16.69	3.14	$F(1, 944) = 3.47$	.74	.71	.77

Note. Numbers enclosed in brackets in the Subscales column denote the minimum/maximum possible scale scores. There are no Cronbach's α coefficients provided for the RQ subscales because such subscales only measure one item. ANOVA = analysis of variance; CI = confidence interval.

* $p < .05$. ** $p < .01$. *** $p < .001$.

with responses ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). In a comparison of other measures of adult attachment, the ECR was found to display the best psychometric properties (Fraleigh, Brennan, & Waller, 2000).

Indices of relationship quality. The Inventory of Parent and Peer Attachment (IPPA; Armsden & Greenberg, 1987; validated for use with young adults by Armsden & Greenberg, 1987 and translated from English to French by Cormier et al., 2001) was used to assess specific elements of participants' relationships with their parents and their friends. The IPPA is a 53-item self-report questionnaire that uses a five-point Likert-type response format, with responses ranging from 1 (*almost never or never true*) to 5 (*almost always or always true*). The items are divided into six subscales: trust (parents/friends) (20 items), communication (parents/friends) (18 items), and alienation (parents/friends) (15 items). Impressive α coefficients have been found in a review of the psychometric properties of the IPPA (Lopez & Glover, 1993).

The Adult Unresolved Attachment Questionnaire (AUAQ; West, Rose, Spreng, & Adam, 2000; validated for use with young

adults by Bureau and associates, 2010 and translated from English to French by Thibodeau, 2005) was used to assess participants' current perceptions regarding childhood relationships to the parent that spent the most time with them at that age. The AUAQ is a 10-item self-report questionnaire that uses a five-point Likert-type response format, with responses ranging from 1 (*strongly agree*) to 5 (*strongly disagree*). The items are divided into three dimensions: aloneness/failed protection (four items), fear (three items), and anger/dysregulation (three items) experienced toward the parent. This questionnaire has been found to have high test-retest reliability, high discriminant validity, and good internal consistency (West et al., 2000).

The Parental Bonding Instrument (PBI; Parker, Tupling, & Brown, 1979; validated for use with young adults by Parker & associates, 1979 and translated from English to French by Mohr, Preisig, Fenton, & Ferrero, 1999) measures individuals' perceptions of their primary caregivers' parenting during their youth. This questionnaire requires adult participants to report how they remember each of their parents during their first 16 years. The PBI

is a 25-item self-report questionnaire that uses a four-point Likert-type response format, with responses ranging from 1 (*very like*) to 4 (*very unlike*). This measure is divided into two subscales: the overprotection/control scale (13 items) and the care scale (12 items). Previous studies lend support to the internal structure of the scale, detailing its high validity and reliability (Kazarian, Baker, & Helmes, 1987).

Dyadic adjustment. The Dyadic Adjustment Scale (DAS; Sabourin, Valois, & Lussier, 2005; validated for use with young adults by Graham, Liu, & Jeziorski, 2006 and translated from English to French by Vandeleur, Fenton, Ferrero, & Preisig, 2003) is a widely used self-report measure of dyadic functioning used to evaluate the degree of couple relationship satisfaction experienced by individuals in romantic relationships. The original version of the DAS contains 32 items, although a shorter, four-item version of this instrument was used in the present study. The first three items in the questionnaire use a six-point Likert-type response format, with responses ranging from 0 (*all of the time*) to 5 (*never*). These three items evaluate individuals' perceptions regarding the quality of life shared with their partners. The fourth item measures individuals' subjective experiences of happiness in their couple relationships and uses a seven-point Likert-type response format, with responses ranging from 0 (*extremely unhappy*) to 6 (*perfectly happy*). This scale has been found to be as effective in predicting couple dissolution as the 32-item version and demonstrates good internal consistency (Sabourin et al., 2005).

The Personal and Relationships Profile (PRP; Straus & Hamby, 1999; validated for use with young adults by Straus & Mouradian, 1999 and translated from English to French by Lafontaine, 2008) is a 187-item measure of individual-level personal characteristics and relationship-level variables. In the present study, participants were only administered two subscales that both measure relationship-level variables: communication problems (eight items) and conflict (nine items). Each subscale uses a four-point Likert-type response format with scores ranging from 1 (*strongly disagree*) to 4 (*strongly agree*). The PRP has also been found to demonstrate good construct and concurrent validity (Straus, Hamby, Boney-McCoy, & Sugarman, 2010).

Psychological well-being. The Outcome Questionnaire (OQ; Lambert & Burlingame, 1996; validated for use with young adults by Lambert et al., 1996 and translated from English to French by Lambert et al., 2004) was used to assess the psychological distress of participants. The OQ is a 45-item self-report questionnaire that uses a five-point Likert-type response format, with responses ranging from 0 (*never*) to 4 (*almost always*). The items are divided into three subscales designed to measure elements of mental health: interpersonal relations (11 items), social roles (nine items), and symptom distress (22 items). The interpersonal relations subscale measures difficulties in individuals' interpersonal relationships. The social roles subscale refers to problems with family, work, and leisure. Finally, the symptom distress subscale evaluates anxiety, depression, and substance abuse. The psychometric properties of the OQ have been supported in previous studies that detail its high reliability and good construct and concurrent validity (e.g., Lambert et al., 1996).

Results

Preliminary Statistics

A total of 2,240 participants participated in this ongoing study. To optimize the sample size, missing values were estimated using expectation maximization. Missing values were random and none of the items had more than 5% missing values, indicating that this option was appropriate for use (Tabachnick & Fidell, 2007). In addition, data from 26 participants were detected as multivariate outliers and subsequently removed from the analyses, leaving a total of 2,214 participants. The means and standard deviations for the variables measured are presented in Table 1, in addition to the results of an analysis of variance by gender.

Factor Analysis

An EFA was performed on a randomly selected subsample of participants ($n = 1,107$). An independent sample t test revealed no differences between this subsample and the other half of the sample with regards to gender, age, language, racial background, relationship status, sexual orientation, length of romantic relationship, having or not having children, or participant-partner cohabitation. The EFA was performed using principal axis factoring to group intercorrelated questionnaire subscales into their constituent dimensions. To investigate latent relationships underlying many manifest variables while maintaining easily interpretable data, an EFA using questionnaire subscales as the units of analysis was performed. Scale-level factor analysis has been conducted in several previous studies (e.g., Archer & Klinefelter, 1991; Caprara, Barbaranelli, Burmudez, Maslach, & Ruch, 2000; Hepner & Sechrest, 2002). Additionally, principal axis factoring was used in the present study because its purpose is to reveal any latent variables underlying a factor structure (Costello & Osborne, 2005). A nonorthogonal (oblique) rotation was used because the factors were expected to be correlated. Initially, a six-factor solution was extracted using Kaiser's stopping rule, with the sixth factor representing the same construct as the fifth factor (Avoidance in Romantic Relationships). A parallel analysis test in conjunction with an evaluation of the scree plot best supported the retention of five factors; therefore, such a five-factor solution was ultimately retained. As indicated by Comfrey and Lee (1992), factor loadings with coefficients of .55 and higher are considered good. Therefore, only those factor loadings were considered significant in the present study. A total of five subscales were dropped because of insufficient loadings (PBI paternal overprotection, PBI maternal overprotection, RQ friend fearful, RQ friend dismissing, and RQ couple dismissing). The factor loadings for the questionnaire subscales are presented in Table 2.

Factor 1 (Overall Participant-Parent Relationship Quality) explained 33.92% of the total variance, with an eigenvalue of 6.11; Factor 2 (Unresolved Attachment to Parents) explained 10.07%, with an eigenvalue of 1.81; Factor 3 (Secure Attachments to Friends) explained 6.94%, with an eigenvalue of 1.25; Factor 4 (Anxiety in Friend and Romantic Relationships) explained 6.01%, with an eigenvalue of 1.08; and Factor 5 (Avoidance in Romantic Relationships) explained 5.05% of the variance, with an eigenvalue of .91. In total, the five factors accounted for 61.98% of the variance. Results demonstrate significant correlations

Table 2
Factor Loadings for Exploratory Factor Analysis With Oblimin Rotation of Attachment Questionnaire Subscales

Subscales	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
IPPA parent trust	.91	-.48	.36	-.28	-.28
IPPA parent communication	.89	-.36	.35	-.20	-.28
IPPA parent alienation	-.79	.41	-.32	.52	.39
PBI maternal care	.74	-.43	.31	-.24	-.29
PBI paternal care	.59	-.27	.25	-.23	-.28
AUAQ failed protection	-.51	.89	-.20	.12	.13
AUAQ anger	-.41	.82	-.16	.20	.13
AUAQ fear	-.31	.81	-.19	.17	.16
IPPA peer trust	.45	-.29	.91	-.36	-.29
IPPA peer communication	.38	-.19	.88	-.22	-.24
RQ friend secure	.28	-.18	.62	-.16	-.42
ECR anxiety	-.34	.21	-.15	.74	.43
RQ couple preoccupied	-.18	.13	-.14	.66	.22
RQ friend preoccupied	-.26	.16	-.25	.60	.14
IPPA peer alienation	-.48	.27	-.50	.59	.40
ECR avoidance	-.43	.20	-.37	.25	.77
RQ couple secure	.31	-.19	.35	-.20	-.75
RQ couple fearful	-.27	.13	-.12	.42	.66

Note. Significant factor loadings are presented in bold. Factor 1 = Overall Participant-Parent Relationship Quality; Factor 2 = Unresolved Attachment to Parents; Factor 3 = Secure Attachment to Friends; Factor 4 = Anxiety in Friend and Romantic Relationships; Factor 5 = Avoidance in Romantic Relationships.

among all of the five factors, supporting the use of oblimin rotation (see Table 5).

CFAs were then conducted with the second half of the sample ($n = 1,107$) to test the resultant dimensionality with the remaining half. Bootstrapping (5,000 samples) was used to manage the presence of multivariate non-normal data within the subsample (Byrne, 2010). A one-factor solution (used to evaluate the trait model) was compared to a five-factor solution (used to evaluate the context-specific model). Inspection of the modification indices for the five-factor model revealed that eight pairs of subscales had significant correlated errors (ECR anxiety and RQ friend preoccupied, ECR anxiety and RQ couple preoccupied, ECR anxiety and RQ couple fearful, RQ couple fearful and RQ couple preoccupied, RQ couple secure and RQ friend secure, AUAQ fear and AUAQ anger, IPPA parent communication and IPPA friend communication, and IPPA friend alienation and IPPA couple alienation). Although some of these pairs of subscales loaded on the same factor (e.g., AUAQ fear and AUAQ anger), other subscales were expected to be linked (e.g., because the ECR anxiety over abandonment subscale and RQ couple fearful subscale measure dimensions of anxiety, they were expected to be linked) and as such were permitted to correlate in the final model.

The fit of the final model for the five-factor solution ($\chi^2(116) = 616.74$, $p < .001$; standardized root mean square residual [SRMR] = .05; comparative fit index [CFI] = .95; root mean square error of approximation [RMSEA] = .06) was deemed adequate (Tabachnick & Fidell, 2007), although the fit of the model for the one-factor solution was not ($\chi^2(135) = 4875.61$, $p < .001$; SRMR = .18; CFI = .55; RMSEA = .12). All items had significant path estimates, with standardized factor loadings ranging between .37 and .98 for the five-factor model and between .27 and .86 for the one-factor model. Results demonstrated a significant difference between the two models and revealed that the five-factor model is most appropriate ($\Delta\chi^2(19) = 4258.86$, $p < .001$).

Hierarchical Regression Analyses

To investigate possible relationships between the five aforementioned factors and psychological and dyadic well-being, six hierarchical regressions were conducted with the first half of the sample ($n = 1,107$). For each analysis, a variable measuring well-being was entered as the dependent variable. These dependent variables consisted of the elements of psychological well-being measured by the OQ (symptom distress, difficulties in interpersonal relations, and difficulties in social roles) as well as the elements of dyadic functioning measured by the DAS (couple relationship satisfaction) and the PRP (communication problems and conflict). Age, gender, and language were entered as control variables in the first step of the models measuring psychological well-being because they were correlated with the dependent variables. Relationship length was also entered as a control variable for the models measuring dyadic functioning. Subsequently, the five factors were entered at the second step. The data presented in this study were not expected to meet all assumptions of hierarchical regression. The data were not expected to meet assumptions of normality or linearity because the variables measured were not expected to have normal distributions or share linear relationships. Non-normal distributions are considered permissible under circumstances in which existing outliers have been removed to reduce the probability of type I and type II errors (Osborne & Waters, 2002). As such, outliers were removed to improve the statistical accuracy. Moreover, the analyses presented in this study were conducted by using a statistical package that accommodated nonlinear regressions. A summary of the results of the hierarchical regression analysis for the psychological well-being models and dyadic functioning models are presented in Tables 4 and 5, respectively. Correlations among criterion variables, control variables, and factors are presented in Table 5.

The first three hierarchical regressions were conducted with symptom distress, difficulties in interpersonal relations, and difficulties in social roles as the dependent variables, respectively. The inclusion of the five factors in the second step resulted in a significant improvement to the regression model. More specifically, results revealed that symptom distress, difficulties in interpersonal relations, and difficulties in social roles are predicted by Overall Participant-Parent Relationship Quality, Secure Attachments to Friends, and Anxiety in Friend and Romantic Relationships. Symptom distress and difficulties in interpersonal relations are also predicted by Avoidance in Romantic Relationships. No relationship was found between Unresolved Attachment to Parents and such variables.

The fourth hierarchical regression analysis was conducted with romantic relationship satisfaction as the dependent variable. The regression model significantly improved after the inclusion of the five factors at step 2. This significant change is attributed to the factor related exclusively to romantic relationships, being Avoidance in Romantic Relationships. Results revealed no significant relationship between romantic relationship satisfaction and Overall Participant-Parent Relationship Quality, Unresolved Attachment to Parents, Secure Attachment to Friends, and Anxiety in Friend and Romantic Relationships.

The fifth and the sixth hierarchical regressions were conducted with communication problems and conflict as the dependent variables, respectively. A significant R^2 change was also revealed after the inclusion of the five factors for both models that was attributed to factors measuring Anxiety in Friend and Romantic Relationships and Avoidance in Romantic Relationships. A significant relationship was also revealed between Secure Attachments to Friends and communication problems. No significant relationship was found between communication problems or conflict and Unresolved Attachment to Parents or Overall Participant-Parent Relationship Quality.

Discussion

The primary objective of the present study was to examine links among participant-parent relationship quality, attachment patterns to friends, and attachment patterns to romantic partners in young adults to investigate whether attachment is best conceptualized as a personality trait or whether attachment patterns are relationship-specific. Findings indicate that aside from some overlap in anxiety experienced in friend and romantic relationships, participants possess unique and distinct patterns of attachment per relationship type and do not experience one general attachment orientation. The results of the present study confirm the hypothesis that findings would reveal variability among relationship types, thus lending support to the conceptualization of attachment patterns as context-specific (e.g., Baldwin et al., 1996; Cozzarelli et al., 2000; Ross & Spinner, 2001).

Results of the EFA partially support the hypothesis put forth regarding the number of factors underlying the factor structure, whereas results of the CFA confirm expectations that a multifactor solution would be revealed as a more appropriate model than a single-factor solution. It was theorized that because the questionnaire package administered to participants measured participant-parent relationship quality, unresolved issues with parents, attachments to friends, and attachments to romantic partners, two factors

would be generated representing relationship quality to parents (one representing overall relationship quality and one representing unresolved issues to parents), one factor would be generated representing attachments to friends, and one factor would be generated for attachments to romantic partners for a total of four factors. Although the factor structure indeed extracted separate dimensions representing the hypothesized factors, it also managed to reveal unanticipated results. Although results revealed unique factors representing security to friends (Factor 3) and avoidance in romantic relationships (Factor 5), the factor structure also indicated a blended factor encompassing anxiety in friend and romantic relationships (Factor 4).

The hypothesized finding of two factors generated for relationships to parents may be explained by participants' experiences of attachment security/insecurity and organization/disorganization felt toward their parents. Attachment patterns to parents are often conceptualized according to two dimensions: security versus insecurity and organization versus disorganization (Main & Goldwyn, 1998). This conceptualization of attachment to parents postulates that elements of fear may be present in relationships to parents given the existence of particular circumstances. Aside from such circumstances, the relationship to the parent is otherwise considered to follow a secure or insecure attachment pattern. For example, if an individual's father is abusive and harms his child, that individual is likely to be insecure and disorganized. On the other hand, if an individual's mother dissociates during critical or upsetting experiences but otherwise is a very capable and loving mother, that individual may experience a disorganized, but secure attachment pattern.

This study's findings compliment those of Furman and colleagues (2002), who have argued that attachment patterns to romantic partners tend to resemble those to friends because friendships and romantic relationships tend to be voluntary and egalitarian whereas relationships with parents are generally more unilateral (Furman, 1999; Furman & Wehner, 1994). As such, the results of the present study may have revealed some overlap between participants' attachment patterns to friends and to romantic partners—as indicated by the dimension representing anxiety in friend and romantic relationships—because young adults' mental models of friendships may influence their expectations in romantic relationships more heavily than do relationships with parents. Furthermore, the blended factor representing anxiety in friend and romantic relationships may also reflect the particular transition point experienced by many young adult university students (Fraley & Davis, 1997). In some respects, romantic relationships may bear a similar resemblance to friendships insofar that partners may not cohabitate or share important responsibilities such as finances or children. Although romantic relationships may require a greater depth of commitment than friendships (Meeus et al., 2007), the level of interdependence involved may be similar (Furman, 1999).

The second objective of the present study was to explore the relative contributions of different relationships types in the prediction of young adult well-being. Findings indicated that four of the five factors revealed by the analyses significantly predicted psychological well-being and provided differential contributions to the dimensions measuring well-being, as determined by the squared semipartial correlations presented in Table 3. Effect sizes generated by the analyses indicated that unresolved attachment to parents (Factor 2) did not significantly predict any of the dimen-

Table 3

Summary of Hierarchical Multiple Regression Analyses Predicting Psychological Well-Being From Five Factors

Predictors	Symptom distress			Difficulties in interpersonal relations			Difficulties in social role		
	ΔR^2	β	sr^2	ΔR^2	β	sr^2	ΔR^2	β	sr^2
Step 1 Control variable ^a	.02***			.02***			.02**		
Step 2	.44***			.56***			.29***		
Factor 1		-.24***	.03		-.30***	.05		-.23***	.03
Factor 2		.04	.00		.00	.00		.03	.00
Factor 3		-.09***	.01		-.11***	.01		-.09**	.01
Factor 4		.37***	.10		.37***	.10		.29***	.06
Factor 5		.16***	.02		.23***	.04		.09**	.01
Total R^2	.46***			.57***			.31***		

^a Control variables included age, gender, and language.

** $p < .01$. *** $p < .001$.

sions of well-being. Although the other four factors were all revealed to be significant predictors of psychological well-being, factors representing anxiety in friend and romantic relationships (Factor 4) and overall participant-parent relationship quality (Factor 1) were revealed as providing the greatest relative contributions.

Such results partially confirmed expectations that factors representing participant-parent relationship quality would provide the greatest contribution in the prediction of psychological well-being. Overall participant-parent relationship quality (Factor 1) indeed served as one of the most significant predictors of all three dimensions of psychological well-being (symptom distress, interpersonal relations, and social roles), although anxiety in friend and romantic relationships (Factor 4) was revealed as the most significant predictor. Secure attachment to friends (Factor 3) and avoidance in romantic relationships (Factor 5) also had an influence on the three dimensions, albeit to a lesser extent. These results suggest that secure relationships with parents maintain crucial importance by contributing positively to psychological well-being. In line with these findings, Ainsworth (1989) contends that throughout adolescence and young adulthood, parents continue to be a powerful contributor to well-being, despite the relatively fewer interactions that individuals may have with them during this developmental

stage. Likewise, Bretherton (1985) has argued that as young adults mature, confidence in parental commitment remains crucial to psychological well-being.

In addition to the influence that relationships with parents may exert on young adult well-being, anxiety in friend and romantic relationships was revealed as an important contributor. Although relationships with parents may remain important to the well-being of young adults, such individuals are experiencing a period of transition as they develop new attachment bonds to friends and to romantic partners (Fralely & Davis, 1997). Parents may continue to provide instrumental support to their young adult children (e.g., financial support, housing support, and emotional support), yet this life stage may encompass an increased emphasis on relationships with friends and partners. The simultaneous importance of relationships with parents and relationships to friends and romantic partners held by young adults may perhaps provide explanation for the results indicating that relational dimensions in all three relationship types significantly influence young adult well-being. This result may also have been generated because the dimensions constituting Factor 4 (Anxiety in Friend and Romantic Relationships) pertain more specifically to anxiety and may therefore better predict psychological distress than other factors that do not (e.g., Factor 3: Secure Attachments to Friends). Factor 2 (Unresolved

Table 4

Summary of Hierarchical Multiple Regression Analyses Predicting Dyadic Functioning From Five Factors

Predictors	Couple relationship satisfaction			Communication problems			Conflict		
	ΔR^2	β	sr^2	ΔR^2	β	sr^2	ΔR^2	β	sr^2
Step 1 Control variable ^a	.01			.03*			.04**		
Step 2	.23***			.22***			.23***		
Factor 1		.10	.01		-.08	.00		-.10	.01
Factor 2		.02	.00		.02	.00		.01	.00
Factor 3		-.07	.00		-.12*	.01		-.03	.00
Factor 4		-.05	.00		.17***	.02		.22***	.04
Factor 5		-.44***	.12		.25***	.04		.26***	.04
Total R^2	.25***			.25***			.27***		

^a Control variables included age, gender, language, and relationship length.

* $p < .05$. ** $p < .01$. *** $p < .001$.

Table 5
Correlations Between Key Variables and Intercorrelations Between Factors

	Factors					Psychological well-being			Dyadic functioning		
	1	2	3	4	5	OQ dist	OQ rel	OQ rol	PRP co	PRP con	DAS sat
Age						.03	.08**	-.01	-.01	.09*	-.11*
Gender						.11***	-.06*	.06*	-.11*	-.15***	.05
Language						-.06*	-.10***	-.09**	.10*	-.01	.03
Relation length						—	—	—	.09	.14**	-.07
Factor 1	—	-.52***	.42***	-.39***	-.41***	-.49***	-.58***	-.42***	-.32***	-.33***	.29***
Factor 2		—	-.24***	.24***	.20***	.30***	.31***	.26***	.20***	.19***	-.14**
Factor 3			—	-.29***	-.35***	-.33***	-.42***	-.29***	-.35***	-.31***	.20***
Factor 4				—	.42***	.57***	.61***	.45***	.34***	.37***	-.27***
Factor 5					—	.45***	.54***	.35***	.41***	.43***	-.48***

Note. OQ dist = OQ distress; OQ rel = OQ relationship; OQ rol = OQ role; PRP co = PRP communication; DAS sat = DAS satisfaction.
* $p < .05$. ** $p < .01$. *** $p < .001$.

Attachment to Parents) did not provide a significant contribution in the prediction of any of the dimensions of well-being. One possible explanation of this lack of association may be the shared variance with Factor 1 (Overall Participant-Parent Relationship Quality) because both factors are strongly correlated ($r = -.52$; see Table 5). When the regression analyses are run without the inclusion of Factor 1 (Overall Participant-Parent Relationship Quality), Factor 2 (Unresolved Attachment to Parents) becomes a significant predictor of psychological distress.

The results of the present study partially confirm the hypothesis that dimensions of attachment in romantic relationships would provide the greatest contribution in the prediction of dyadic functioning. Only the factor encompassing avoidance in romantic relationships (Factor 5) was revealed as a statistically significant predictor of couple relationship satisfaction, as determined by squared semipartial correlations presented in Table 4. This result offers further support to the context model of attachment (Baldwin et al., 1996; Cozzarelli et al., 2000; Ross & Spinner, 2001), suggesting that young adults hold unique perceptions regarding their attachment relationships to intimate partners, and it is these specific perceptions that contribute to feelings of couple satisfaction. Furthermore, factors encompassing attachment security to friends (Factor 3), anxiety in friend and romantic relationships (Factor 4), and avoidance in romantic relationships (Factor 5) were revealed as significant predictors of communication problems. Additionally, factors encompassing anxiety in friend and romantic relationships (Factor 4) and avoidance in romantic relationships (Factor 5) were revealed as significant predictors of conflict.

These findings suggest that although anxiety experienced in friend and romantic relationships and avoidance in romantic relationships indeed provide the greatest relative contributions to communication problems and conflict skills, relationships with friends may also contribute to such relationship variables. This finding may be a result of the key effect that friends have in the development of communication and conflict resolution skills in young adult personal relationships (Laursen, Finklestein, & Betts, 2001; Reese-Weber & Bartle-Harding, 1998).

In addition to the explanation provided for the results and conclusions of the present study, its methodological limitations also merit discussion. Relationship quality and attachment patterns in the three relationship types were measured using different

self-report questionnaires. Because each self-report questionnaire measured different relational dimensions, it is possible that the results of the present study do not actually reflect differences among participant-parent relationship quality, attachment patterns to friends, and attachment patterns to romantic partners. Although the results may appear to denote context-specific attachment patterns across relationship types, the findings may simply reflect the different dimensions of attachment/relationship quality measured by each questionnaire. The potential of such a bias is unlikely because unrotated factor solutions did not reveal numerous factors representing the many dimensions measured, but rather the dimensions loaded on six factors. Moreover, it should be noted that although the results of the present study suggest relationships with parents, friends, and romantic partners may influence well-being, the correlational nature of the study does not allow us to infer causation between relationship quality/attachment patterns and well-being despite the hypothesized directionality between these variables.

Researchers may be interested in examining potential variations in attachment patterns within specific relationship types, rather than strictly evaluating relationship quality/attachment patterns between particular relationship types, as done in the present study. Researchers may also be interested in further investigating the finding that young adults may possess predominantly avoidant attachment patterns toward romantic partners despite reporting secure attachments to parents and friends. Further examination of this finding may eventually lead to a greater understanding of the mental representations of young adults regarding romantic relationships.

This study's findings demonstrate the complexity of young adult attachment relationships and the importance of acknowledging that each attachment bond experienced may develop in a unique manner. The present study also emphasizes the contribution of different relationships to well-being and may potentially expand the modest body of research that investigates links among attachment patterns in different relationship types. The findings reported may hold certain implications for attachment theory because they offer empirical support for a prevailing conceptualization of attachment. Although conclusions predominately fit within a context-specific view of attachment, findings suggest an overlap between young adult attachment patterns to friends and romantic partners. These

findings suggest that although young adults may hold context-specific conceptualizations of their relationships to their parents, similar feelings of anxiety may affect relationships with friends and romantic partners. Results also suggest that although relationships with parents, friends, and romantic partners may all contribute to the psychological and dyadic well-being of young adults, such relationship types should be conceptualized as unique variables that may differently influence well-being. Continued research evaluating the trait and context-specific models may eventually lead to an empirically confirmed understanding of how young adults experience attachment across different relationship types.

Résumé

Deux modèles théoriques de l'attachement ont été proposés. Le modèle des traits conceptualise l'attachement comme une caractéristique générale de la personnalité d'un individu, alors que le modèle contextuel conceptualise l'attachement comme étant propre à la relation. La qualité des relations entre les participants et leurs parents, les patrons d'attachement dans les relations avec les amis et les patrons d'attachement dans les relations avec les conjoints ont été examinés afin de déterminer si les participants expérimentent une orientation d'attachement générale, de type trait, ou si les patrons d'attachement sont propres au contexte. Un échantillon de 2214 jeunes adultes (76 % de femmes) âgés entre 17 et 25 ans ont été recrutés dans les cours de psychologie à l'université. Les étudiants ont complété un ensemble de questionnaires comprenant cinq mesures auto-rapportées évaluant les dimensions relationnelles par rapport aux parents, aux amis et aux conjoints, ainsi qu'une mesure auto-rapportée de bien-être psychologique. Les participants dans une relation de couple ont aussi complété deux mesures auto-rapportées de bien-être dyadique. Les résultats des analyses factorielles exploratoires et confirmatoires appuient une conceptualisation des patrons d'attachement comme des variables propres au contexte parce que résultats ont révélé des distinctions entre les patrons et la qualité de l'attachement envers les parents, les amis et les conjoints. Les résultats des analyses de régression suggèrent que de telles relations contribuent différemment au bien-être psychologique des participants et au fonctionnement dyadique.

Mots-clés : attachement chez les jeunes adultes, modèle des traits, modèle propre au contexte, bien-être psychologique, fonctionnement dyadique.

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Received January 8, 2011

Revision received February 23, 2012

Accepted February 27, 2012 ■