Article

JSPR

Journal of Social and
Personal Relationships
30(5) 529–544
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sagepub.co.uk/journalsPermissions.nav
DOI: 10.1177/0265407512461200
spr.sagepub.com

Strong but insecure: Examining the prevalence and correlates of insecure attachment bonds with attachment figures

Marina Milyavskaya
John E. Lydon
McGill University, Canada

Abstract

This study examined whether people can be insecurely attached to figures who are actively sought out (and not just desired) to fulfill attachment functions and whether this has negative consequences for psychological well-being. A total of 122 participants rated 3–15 relational targets on measures including the extent to which the target fulfills important attachment functions and the attachment style characterizing the relationship. Participants also completed general measures of well-being and attachment style. We specifically focused on targets who could be classified as attachment figures based on the WHOTO and examined the attachment style characterizing these relationships. Results show that a significant proportion of attachment bonds can be characterized by insecurity, which has consequences both for the extent to which these attachment figures can fulfill important attachment functions and for overall well-being. The discussion considers the implications of these results for attachment priming research and the distinction between attachment strength and security.

Keywords

Attachment security, attachment strength, attachment styles, well-being

Corresponding author:

Marina Milyavskaya, Department of Psychology, McGill University, 1205 Doctor Penfield Avenue, Montreal, Quebec QC H3A 1B1, Canada.

Email: marina.milyavskaya@mail.mcgill.ca

People have a fundamental need for relatedness (Baumeister & Leary, 1995; Deci & Ryan, 2000), which is often satisfied through dyadic relationships with friends, family, and intimate partners. One of the functions of relatedness is to regulate felt security, which we do by forming bonds with others. But does forming attachment bonds per se result in attachment security? Because relatedness is such a fundamental need, we theorize that in pursuing it people will, under some circumstances, form attachment bonds with others even if these bonds do not fully satisfy the functions of attachment security (i.e., providing a secure base and safe haven, and encouraging proximity seeking). In other words, we expect that a strong attachment bond is possible even in relationships characterized by attachment insecurity. Furthermore, we propose that having such insecure attachment bonds has a negative impact on general well-being.

Attachment research conceptualizes an attachment figure as someone who is used for proximity seeking, as a secure base, and as a safe haven (Mikulincer & Shaver, 2007). Attachment figures, however, are not always responsive to bids for proximity and to individual needs in general (Mikulincer & Shaver, 2003). This distinction between the presence and the quality of an attachment relationship was first described by Bowlby, who found that infants will become attached to a stable caregiver independently of how the caregiver treats them (Bowlby, 1969/1982). Secure attachments develop when the caregiver is consistently available to provide comfort in the face of a threat. Conversely, insecure attachment with a caregiver can develop when that caregiver is unresponsive or responds inconsistently to the infant's needs. However, it is the pattern of seeking comfort and security in the relationship that distinguishes an attachment bond from an affectionate bond (Ainsworth, 1989), and not whether the comfort and security is actually found. Although Bowlby and Ainsworth examined only infant attachment, a similar definition of attachment bonds could extend to adults, such that a person who is sought out for comfort but is unresponsive to individual needs could nevertheless be characterized as an attachment figure. Although attachment bonds with those who provide security are likely preferred, factors such as the availability of such figures and personal global attachment style may result in the formation of attachment bonds in insecure relationships characterized by anxiety or avoidance.

Attachment security is thought to be the key aspect of the relationship that accounts for the positive effects experienced both within the relationship and outside of it, as security can alleviate threat and allow the person to pursue ongoing activities. In order for a person to experience security within an attachment relationship, the attachment figure must be available, sensitive, and responsive to the individual (Mikulincer & Shaver, 2007). However, an individual may not have close others who meet these criteria. Because attachment needs are so strong, the individual may nevertheless form attachment bonds in the absence of attachment security. As attachment strength (i.e., the extent to which a target is sought out to fulfill attachment functions) does not necessarily correspond to attachment security, it can be thought of as a separate dimension on which significant others can vary.

Research investigating attachment patterns across relational partners has typically focused exclusively on attachment security. Many of these studies investigated the variability in attachment security across relational partners (Cook, 2000; La Guardia, Ryan, Couchman, & Deci, 2000; Pierce & Lydon, 2001). In these studies, participants

typically rate whether their relationships with specific other individuals (e.g., mothers, fathers, romantic partners, etc.) are characterized by security and insecurity, with results showing that there is substantial within-person (between-target) variability. However, in these studies, the researchers did not seek to identify whether the targets were actually used for attachment functions, and so did not test the strength of the attachment bond.

Few studies have investigated this dimension of attachment strength. In one study that did focus on this (Doherty & Feeney, 2004), attachment strength was operationalized based on whether the target was mentioned as serving each of the four attachment functions (secure base, safe haven, proximity seeking, and separation protests) and the order in which the mention occurred. In that study, participants could list up to five people who met each of the functions (with two items per function); for each item, those mentioned first were assigned a score of 3, those mentioned second were assigned a score of 2, and any subsequent mentions were rated as 1. All ratings were then averaged across the items and the functions to arrive at a score of attachment strength. In that study, results showed that people report the strongest attachment to partners (i.e., they are most likely to turn to them to fulfill attachment functions), followed by children, friends, mothers, siblings, and fathers (Doherty & Feeney, 2004). Following the definition of Doherty and Feeney, attachment strength can thus be considered as the extent to which people turn to a given target for the fulfillment of these functions, independent of whether these targets satisfactorily fulfill them.

In one study that investigated both attachment security and attachment strength, Trinke and Bartholomew (1997) found that young adults have multiple attachment figures, but that the security of the attachment bond correlates only moderately with the extent to which the figures are used for attachment functions. Importantly, attachment security was linked more strongly with actual use of an attachment figure as a safe haven and a secure base than with a desire to use the attachment figures for those functions, suggesting that people often would like to turn to others with whom they are insecurely attached but are more likely to actually turn to others with whom they are securely attached. Building on this past research, the present study tests whether people can be insecurely attached to figures who are actively sought out (and not just desired) to fulfill attachment functions and whether this has negative consequences for psychological well-being.

Given that the strength of the attachment bond appears to be a separate dimension from attachment security, it seems likely that at least some relationships with attachment figures will be characterized by an insecure attachment style. This, however, has largely been overlooked in attachment research, which often conflates attachment strength and attachment security. This is particularly evident in numerous studies that used attachment figures as prototypes in priming attachment security (e.g., Mikulincer, Hirschberger, Nachmias, & Gillath, 2001; Mikulincer, Shaver, Gillath, & Nitzberg, 2005). Many such studies elicit the names of attachment figures using the WHOTO, an instrument that asks participants who they turn to for a safe base, a secure haven, and for proximity seeking (Fraley & Davis, 1997). Implicit in this conceptualization is that these figures actually satisfactorily fulfill these important attachment functions. However, it is possible to imagine a case where a person turns to

another for support, and this other is unavailable. While some people may respond by seeking others to fulfill these attachment functions, this does not always occur, and some individuals may develop a strong but insecure attachment bond with a chronically unavailable or unreliable other.

Although previous research has looked at the presence versus absence of a secure attachment model with multiple partners, such research did not examine attachment security relative to attachment insecurity (e.g., Trinke & Bartholomew, 1997). This poses some ambiguity because a relatively lower score on security does not mean that the attachment bond is necessarily insecure. For example, Mary might be more securely attached to her mother than her father, but it does not necessarily mean that her relationship with her father is characterized by insecurity. In another set of studies, La Guardia et al. (2000) did include insecurity, but with an overall score of security computed by subtracting the average of the three insecure scores (dismissive, preoccupied, and fearful) from the secure score. Because relationships can be characterized by one type of insecurity but not others, for example, a high score on preoccupied and a low score on dismissive, with an intermediate score on secure; it is likely that the procedure used by La Guardia and colleagues would underestimate the level of insecurity in many relationships. The present study seeks to improve on this by using the highest score of the three types of attachment insecurity (thereby focusing on the specific type of insecurity by which the relationship is characterized) as a contrast to the secure score in order to categorize the relationship as secure versus insecure.

In the present study, we were thus interested in looking at both attachment security and attachment strength to determine the extent to which relationships with attachment figures are characterized not only by security but also by attachment insecurity. In order to take into account attachment strength and ensure that we did not look at relational partners who were not actual attachment figures (i.e., who were low on attachment strength), we considered only targets who were mentioned two or more times on the WHOTO as an attachment figure. Although this operationalization does not meet the criteria of "full-blown" attachment that requires the relational partner to fulfill every function (Hazan & Zeifman, 1994), our criteria is consistent with priming studies that either use the person most frequently mentioned on the WHOTO as an attachment figure independently of the number of functions that person fulfills (e.g., Mikulincer et al., 2001) or use any person mentioned on the WHOTO (e.g., Gillath et al., 2006; Mikulincer, Gillath, & Shaver, 2002). We thought that our criterion represents a good compromise between the overly inclusive approach of considering anyone mentioned on the WHOTO and the strict criteria of full-blown attachment. We hypothesized that at least some attachment figures would be categorized as insecure by participants, and that these insecure figures would be worse at actually fulfilling the attachment functions. Furthermore, we were interested in the proportion of such relationships or how commonly people form strong insecure attachment bonds.

Because we expected some people's primary attachment figures to be insecure, we were also interested in the potential implications of having an insecure attachment figure. Previous research on attachment security with specific partners has shown that having a secure attachment with specific individuals, such as parents or

romantic partners, is beneficial for a variety of positive outcomes (e.g., Armsden & Greenberg, 1987). More generally, the quality of people's day-to-day interactions has been shown to predict well-being (Nezlek, 2000), and positive relationships with others and received social support have been shown to be associated with not only psychological but also physiological functioning including mortality (Ryff, Singer, Wing, & Love, 2001; Uchino, Uno, & Holt-Lunstad, 1999). On the other hand, both attachment anxiety and attachment avoidance have been associated with lower subjective well-being (Wei, Liao, Ku, & Shaffer, 2011) and with greater anxiety and depression in both adolescents (e.g., Muris, Meesters, van Melick, & Zwambag, 2001) and adults (e.g., Murphy & Bates, 1997). In research on specific attachment figures, La Guardia et al. (2000) found that the average of attachment security across four important relationships partners (mother, father, romantic partner, and friend) was positively related to greater well-being. Based on these findings, we predicted that people who have insecure attachment figures would report lower well-being than those who have secure attachment figures.

Finally, we were interested in the relationship between having a secure or insecure attachment figure and trait-level dispositional attachment orientation (attachment style). A good deal of research has examined the attachment quality among close relationships and their association with dispositional attachment (Cozzarelli, Hoekstra, & Bylsma, 2000; Pierce & Lydon, 2001) and found modest associations. However, research to date has not focused exclusively on attachment figures. We theorized that felt insecurity toward an attachment figure may be especially impactful on overall self-assessments of attachment style. We therefore expected that attachment avoidance and anxiety would be higher in those who have an insecure attachment figure.

In the present study, we asked participants to nominate people in their lives representing a variety of relationships, including attachment figures, other close individuals who were not attachment figures, autonomy-supportive others, and acquaintances.[1] Participants then rated each relationship on a number of dimensions, including the extent to which the person fulfills important attachment functions, the closeness of the relationship, and the attachment style characterizing the relationship. This allowed us to verify that attachment figures nominated on the WHOTO fulfill attachment functions more than non-attachment close others, autonomy supportive others, and acquaintances, and that these attachment figures are more likely to be categorized as secure relationships than insecure relationships. We also tested the following hypotheses: first, we expected that not all attachment bonds are characterized by attachment security and that a substantial proportion of attachment bonds could be characterized by attachment insecurity. Second, we expected that in such insecure attachment relationships, the target attachment figure is less likely to fulfill the attachment functions. In particular, we expected that there would be differences in attachment security and function fulfillment even between those targets who could be categorized as attachment figures. We also hypothesized that people who have strong but insecure attachment relationships will experience lower subjective well-being than people who have strong secure attachment relationships. Finally, we expected that those participants with an insecure attachment figure will report greater trait attachment anxiety and avoidance.

Method

Participants and procedure

A total of 143 student participants (mean age = 22.27 years, 71% female) from Montreal, Canada, completed an online survey for course credit or a 10$ Amazon gift certificate. They were first asked to complete general measures of well-being and the Experiences in Close Relationships Scale (ECR; Brennan, Clark, & Shaver, 1998) as a measure of attachment anxiety and avoidance. They then completed the WHOTO measure (Fraley & Davis, 1997), where they were asked to name one person for each of six descriptions. Following this, they were asked to name two to 10 close others (who may or may not have been mentioned on the WHOTO and therefore may or may not have been attachment figures), up to five people with whom they were not close but who were autonomy supportive, and one acquaintance who they have not yet mentioned and with whom they were not particularly close. This procedure allowed us to determine people's attachment figures as well as to obtain four categories of relationships that could then be used as comparison groups for attachment figures (see *Description of each target category* section below for full description). They were then asked to complete attachment measures about each person they indicated. These included measures assessing the fulfillment of attachment functions and attachment security. Participants also indicated the number of days per week that they communicate with each person. Overall, each person rated an average of 10 others (range = 3–16), for a total of 1427 target people rated.

At the end of the survey, one question probed honesty ("I answered all questions honestly") and three other questions probed diligence in answering the questionnaire ("I read the questions carefully"; "I was with other people"(reversed); "I clicked on the answers without reading the questions"(reversed)). All four questions were answered on a 7-point scale. To enhance the quality of our data, we removed participants who were less than midway in honesty (less than a four), as well as those who responded with a one or two on any one of the diligence questions. A total of 21 respondents were eliminated from the study on the basis of their answers, leaving 122 participants (68% female). We also removed any targets who were not unique attachment figures (e.g., 'mom and dad'), resulting in a total of 1293 targets.

Measures

WHOTO. This questionnaire asked participants to provide the names of close persons who serve proximity seeking, secure base, and safe haven attachment functions (Fraley & Davis, 1997). Two items tapped the proximity-seeking function ("Who is the person you most like to spend time with?"; "Who is the person you don't like to be away from?"). Two items tapped the safe-haven function (e.g., "Who is the person you would count on for advice?"), and two items tapped the secure-base function (e.g., "Who is the person you can always count on?"). For each item, participants were instructed to write the name of the person and indicate their relationship to that person. Participants indicated on average 2.77 distinct persons on this measure (SD = 1.17). Of the 330 targets indicated on the WHOTO, 169 (51.2%) were mentioned at least twice. We considered

the people who were mentioned on the WHOTO two or more times in response to two different questions, irrespective of the functions, to be actual attachment figures. Attachment strength was operationalized as the number of times the target was mentioned on the WHOTO. Those who were mentioned only once on the WHOTO (referred to as 'low WHOTO' later in the article) did not represent sufficiently strong attachment figures and so were not considered in the main analyses.

General attachment anxiety and avoidance. Attachment avoidance and anxiety were assessed using the Experiences in Close Relationships Scale (ECR; Brennan, Clark, & Shaver, 1998). The ECR is a self-report measure assessing adult attachment styles, specifically, how people generally experience anxiety, closeness, and dependency in their close relationships. For the purpose of the present study, the items were worded to focus on relationships in general and not just on romantic relationships. The questionnaire consists of 36 items reflecting two orthogonal factors of avoidant insecurity (18 items; e.g., "I want to get close to others, but I keep pulling back") and anxious insecurity (18 items; e.g., "My desire to be very close sometimes scares people away"). Participant ratings are scored using a 7-point Likert-type scale ranging from 1 (*disagree strongly*) to 7 (*agree strongly*). The scale was reliable, $\alpha = .93$ for both subscales.

Subjective well-being. Participants completed a nine-item scale of affect (Emmons, 1992) that included four positive (e.g., "joyful") and five negative (e.g., "frustrated") items, and the five-item Satisfaction with Life Scale (SWLS; Diener, Emmons, Larsen, & Griffin, 1985). All items were rated on a scale from 1 (*strongly disagree*) to 7 (*strongly agree*). All three scales were reliable, $\alpha = .88$ for positive affect, $\alpha = .81$ for negative affect, and $\alpha = .91$ for life satisfaction. A Principal Components Analysis was conducted on the three scales, and only one component was extracted (second highest eigenvalue= .75), accounting for 62% of the variance. All well-being aspects loaded strongly on this component, with factor loadings ranging from .65 to .86. Therefore, the three scales were averaged (with negative affect reversed) to form an index measure of subjective well-being.

Description of each target category. Participants were asked to name up to 10 others who they considered to be close relationships, up to five who they considered to be autonomy supportive, and one acquaintance. The term "target" will be used throughout the manuscript to designate a person in any of those categories who was rated by the participant. Close others were described as "significant people in your life, those people that you currently feel a strong emotional tie to, regardless of whether this tie is positive, negative, or mixed." We used the WHOTO responses to sort the other close relationships into the categories of high WHOTO, low WHOTO, and close other not mentioned on the WHOTO. Autonomy supportive others were described as "someone who you know or have known in the past who believes in you, encourages you to be yourself and pursue your own interests, and is supportive of your choices and decisions. These people could be teachers, coaches, employers, or acquaintances, or anyone else who you have encountered in your life but are not particularly close to." Participants were also instructed not to indicate anyone who was already mentioned in the "close other"

category. At the end of the survey, participants were asked to name "one other person in your life that you have not listed yet. This would be someone who you may be somewhat prominent in your life but you do not have strong feelings about the person, maybe an acquaintance, a co-worker, a teammate".

Fulfillment of attachment functions. To assess the extent to which targets actually fulfilled the various attachment functions of safe haven, secure base, and proximity seeking, we used items derived from the WHOTO (e.g., "To what extent can you count on this person for advice?") and from Trinke and Bartholemew's (1997) Attachment Network Questionnaire (e.g., "How important is it for you to see or talk with this person regularly?"), which were rated on a 7-point Likert-type scale ranging from 1 (*not at all*) to 7 indicating (*completely*). Three items were used for each of the three functions (secure base, safe haven, and proximity seeking). Since the average ratings of the three functions were highly correlated (r's = .68 to .80), we combined them together to form a measure of attachment function fulfillment.

Attachment security. Given that we expected participants to have different experiences of security with their attachment figures irrespective of attachment strength, we employed the Bartholomew and Horowtiz's (1991) four-item attachment security measure to determine the attachment style that characterized the respondent's relationship with each target. Participants rated each target on the extent to which their relationship was characteristic of a secure, preoccupied, fearful, and dismissive attachment using a scale of 1 (*not at all*) to 7 (*completely*). Each target was then categorized as secure if the score on the secure vignette was higher than each of the three insecure vignettes. Conversely, if a target was rated on any one of the insecure vignettes as higher or equal to the secure vignette, that relationship was categorized as insecure.

Closeness. Participants were asked to rate their closeness to each target, using one item "How close do you feel to this person?" which was rated on a 7-point Likert-type scale from 1 (*not at all*) to 7 (*completely*).

Results

To first ensure that the nominated attachment figures were in fact true attachment figures, we compared the scores of attachment figures to the other targets. To control for non-independence, we conducted analyses using linear mixed-effects modeling in SPSS (SPSS Inc., 2002) with target category (mentioned on the WHOTO twice or more, mentioned on the WHOTO once, close other not mentioned on the WHOTO, autonomy supportive other, acquaintance) as the independent variable. As expected, results showed that relational partners who were nominated at least twice on the WHOTO were rated higher than the other targets on ratings of safe haven, secure base, and proximity seeking (Table 1). Given that the patterns were the same for all three attachment functions, and that they were highly correlated, we combined them for future analyses to obtain one score of attachment function fulfillment. This pattern also held for closeness.

We next looked at the attachment security of the attachment figures. Of the 169 targets who served as attachment figures, 26.5% were categorized as insecure based on the method described above. Given the categorization of targets as secure or insecure, we expected secure attachment figures to better serve the various attachment functions of

Table 1. Mixed analyses estimated marginal means and standard errors of attachment variables by target category.[a]

	N	Proximity seeking	Secure base	Safe haven	Attachment functions (combined)	Closeness
WHOTO high	169	5.67 (.10)[b]	6.04 (.11)[b]	5.70 (.11)[b]	5.80 (.09)[b]	6.13 (.12)[b]
WHOTO low	161	5.13 (.11)[c]	5.49 (.12)[c]	5.05 (.11)[c]	5.22 (.10)[c]	5.73 (.12)[c]
Close other	488	4.53 (.08)[d]	4.72 (.08)[d]	4.35 (.08)[d]	4.53 (.07)[d]	5.05 (.09)[d]
Autonomy-supportive other	352	3.40 (.09)[e]	3.81 (.09)[e]	3.47 (.09)[e]	3.55 (.08)[e]	3.67 (.10)[e]
Acquaintance	122	3.34 (.11)[e]	3.27 (.13)[f]	2.99 (.12)[f]	3.20 (.11)[f]	3.29 (.13)[f]

WHOTO high: mentioned two or more times on the WHOTO; WHOTO low: mentioned once on the WHOTO.
[a]The same superscript within a column denotes that the values are not significantly different from each other at $p < .05$.

safe haven, secure base and proximity seeking than insecure attachment figures. Mixed analyses showed this to be the case. There were significant differences between the secure and insecure attachment figures on the extent to which they fulfilled the attachment functions ($M = 5.97$ for secure, $M = 5.31$ for insecure; $t = 4.82$, $p < .001$),[2] and in self-reported closeness ($M = 6.38$ for secure, $M = 5.50$ for insecure; $t = 5.04$, $p < .001$).[3] However, we found no difference in the number of times the target was mentioned on the WHOTO ($M = 3.46$ for secure, $M = 3.18$ for insecure; $t = 1.27$, non-significant (n.s.)) or in the number of functions in the WHOTO on which the target was mentioned ($M = 2.20$ for secure, $M = 2.24$ for insecure; $t = .37$, n.s.). An equal proportion (32%) of both the secure and the insecure targets were mentioned on all three functions, qualifying them as full-blown attachment figures (Hazan & Zeifman, 1994). Additionally, there was no difference on the number of days per week on which the participant communicated with the target ($M = 5.26$ for secure, $M = 5.12$ for insecure; $t = .35$, n.s.). This suggests that although secure and insecure attachment figures do not provide the same experiences in the relationships, people nevertheless seek them out to the same extent.

To test our hypothesis that having secure versus insecure attachment figures is related to differential well-being outcomes, we wanted to compare the well-being of participants who had secure and insecure attachment figures. However, because we had some participants with both a secure and an insecure attachment figure, we added this mixed category to our analyses. We did not have any a priori predictions regarding whether these participants would be more similar to those who only had secure or only insecure attachment figures. A total of 76 participants had one or more secure attachment figures, 25 had one or more insecure attachment figures, and 13 had one of each. Eight participants did not have an attachment figure that was mentioned multiple times on the WHOTO and were excluded from the analyses. A one-way analysis of variance (ANOVA) showed a significant main effect of attachment figure category (secure, insecure, or both) on well-being, $F(2, 111) = 4.84$, $p < .05$, $\eta^2 = .08$ (Table 2). Participants who had one or more insecure attachment figures reported significantly lower subjective

Table 2. Means and *SDs* for between-person analyses based on the security of attachment figures.[a]

	N	Well-being	Avoidance	Anxiety
Secure	76	4.85 (.91)[b]	3.23 (1.14)[b]	3.64 (1.29)
Insecure	25	4.27 (.80)[c]	3.72 (.89)[c]	3.70 (1.03)
Both	13	4.99 (.72)[b]	3.85 (.98)[c]	3.81 (.82)

[a]The same subscript within a column denotes that the values are not significantly different from each other at p < 06.

well-being (M = 4.27) than those who had one or more secure attachment figures (M = 4.85, t = 2.91, p < .05) and those who had both secure and insecure attachment figures (M = 4.99, t = 2.42, p < .05). These results were virtually unchanged when we controlled for trait anxiety and avoidance.

Finally, we examined the trait attachment anxiety and avoidance exhibited by participants who had one or more secure attachment figures, those who had one or more insecure attachment figures, and those who had at least one of each. A one-way ANOVA showed a significant main effect of attachment figure category (secure, insecure, or both) on avoidance, $F(2, 111) = 3.\ 24$, $p < .05$, $\eta^2 = .06$. Participants who had only secure attachment figure/figures reported significantly lower trait avoidance (M = 3.23) than those who had only insecure attachment figure/figures (M = 3.72, t = 2.00, p < .05) and marginally lower trait avoidance than those who had both secure and insecure attachment figures (M = 3.85, t = 1.93, p = .056). There were no differences in attachment anxiety among the three groups, $F(2, 111) = .12$ (n.s.); $\eta^2 = .00$. The means for all between-person analyses are reported in Table 2. These results remain the same when we control for the number of attachment figures. Additionally, the results of regression analyses with a continuous independent variable representing the number of secure and insecure figures were significant for well-being and avoidance, and insignificant for anxiety, replicating the results of the ANOVAs.

Discussion

Overall, our results show that although people turn to others to fulfill important attachment functions, not all targets actually fulfill these functions to the same extent. In particular, attachment relationships characterized by insecurity do not provide the same satisfaction of basic attachment needs. Despite this, people turn to these attachment figures to the same extent and for the same functions as they do to others with whom they feel secure, and who do a better job of meeting their needs. Importantly, this does not only happen in isolated cases, as over a quarter of the targets indicated as attachment figures by our participants were characterized by insecurity. Having a primary attachment relationship characterized by insecurity was related to lower subjective well-being, suggesting that there are real consequences to turning to someone with whom one feels insecure to meet attachment functions. However, having at least one secure attachment figure was related to higher well-being, as evidenced by our finding that participants who had both types of attachment figures reported equally high well-being as those with only secure attachment figures.

A question that arises from our findings concerns the reasons why someone would seek out relationships characterized by insecurity to fulfill important attachment functions. This could occur because of the limited availability of supportive figures in one's environment. Regrettably, not everyone is in a social environment where there are opportunities for positive social bonding. Rather than disengaging completely (and thereby relinquishing the fundamental need for relatedness), most people pursue whatever relatedness opportunities are available to them, resulting in strong attachment bonds being forged with others who do not adequately fulfill all the attachment functions. Indeed, even in such relationships, the insecure attachment figure may still meet some needs, albeit in a sub-optimal fashion. This dynamic is most evident in some abusive relationships, where individuals who are abused by their partners nevertheless remain in the relationship (Griffing et al., 2002). Such extreme examples serve as evidence that even unhealthy attachment bonds are difficult to abandon, as some people would rather have unhealthy attachment bonds than no bonds at all (Slotter & Finkel, 2009).

Alternatively, people may turn toward unhealthy attachment bonds despite the presence of others who are supportive figures. This could happen for a number of reasons. First, the available supportive other may not be perceived as supportive because support can be invisible (Bolger, Zuckerman, & Kessler, 2000) and the correspondence between perceived and actual support is not perfect (e.g., Lakey et al., 2002). Moreover, attachment insecurity can interfere with the perceptions of support (Collins, Ford, Guichard, & Allard, 2006). Second, even if an individual perceives that a highly supportive person is available, other factors such as sexual attraction, personality, or psychodynamics may draw the individual to a different person who elicits attachment insecurity. For example, Mary might be attracted to John for his sense of humor and physical appearance, and with time, she may rely on him for attachment functions even if he is not consistently available or able to adequately fulfill these functions. Finally, insecure attachment bonds may be maintained despite the availability of alternatives due to issues of obligation (either psychological or instrumental), such as with parents who did not adequately fulfill attachment functions, or a partner who is the sole income provider. Future research is needed to better understand how attachment relationships are initiated and develop, focusing on criteria used to select eventual attachment partners. A better understanding of the nature of the insecure attachment relationships would also provide further information to explain the persistence of insecure attachment bonds.

As expected, we found negative repercussions of having insecure attachment bonds on well-being. Specifically, participants who had one or more insecure attachment figures reported lower subjective well-being compared with participants who had at least one secure attachment figure. This was true even in analyses controlling for trait attachment anxiety and avoidance, suggesting that people's specific relationships have an effect on psychological well-being independently of general attachment styles. This supports previous research that has shown multiple benefits of positive relationships (Ryff et al., 2001) and day-to-day interactions with others (Nezlek, 2000) which are likely to be more closely linked with the quality of one's specific interaction partners than with one's general attachment style. Although we only assessed subjective well-being in this study, it is likely that having primary insecure attachment figures also

has repercussions in other areas of functioning. In particular, if the attachment figures do not adequately fulfill the functions of providing a safe haven and secure base, people whose primary attachments are characterized by insecurity might be less likely to have the tools necessary to face the world. Indeed, secure attachment has been linked with exploration (Green & Campbell, 2000), optimism, and curiosity (Mikulincer, 1997), suggesting that these could also be compromised. Future studies are needed to determine the full extent of the repercussions of having a primary insecure attachment bond.

Although we had expected that the security or insecurity of one's attachment relationships would be related to trait-level dispositional attachment orientation, we found this to be true only for attachment avoidance and not for attachment anxiety. Of course, previous research has found only modest associations between trait-level and relationship specific attachment (Cozzarelli et al., 2000; Pierce and Lydon, 2001). But why are there the differential associations for avoidance and anxiety? One possible reason for our results is that insecure attachment figures may have been characterized by avoidance more than by anxiety. A descriptive analysis revealed that participants were 60% more likely to regard their relationships with insecure attachment figures as dismissive-avoidant than preoccupied-anxious. That said, individuals reported extremely low attachment anxiety in their secure relationships (the mean ratings of the preoccupied and fearful attachment items which tap into anxiety were less than two on a scale of 1 to 7) and yet this did not always translate into low dispositional attachment anxiety. Another possibility is that individuals who cannot rely on their attachment figures may cope by withdrawing and adopting an avoidant attachment style; this is supported by previous research which has shown that relationship specific attachment generalizes over time to dispositional attachment (Pierce & Lydon, 2001). In contrast, there appears to be greater fluidity between attachment security and anxiety (Davila, Burge, & Hammen, 1997). Longitudinal research is needed to better understand the effects of primarily insecure attachment figures and the plasticity of more global attachment dispositions.

Currently in the attachment literature, there is an implicit assumption that the WHOTO instrument elicits secure attachment figures. Indeed, multiple studies have used people nominated on the WHOTO to successfully prime security (e.g., Mikulincer et al., 2001). Our results offer a caveat to this assumption, as approximately a quarter of the targets nominated two or more times on this measure were insecure attachment figures and this proportion remained even with the stricter criteria of full-blown attachment. This points to a number of issues. First, attachment figure primes are likely priming attachment strength which is naturally confounded with attachment security but not isomorphic with it. The effect of priming security might be so strong that priming insecurity even a quarter of the time still does not dissipate the security effect enough to nullify it. However, there may be a file drawer problem of null findings due to a weak priming of attachment security. Moreover, some of the effects of attachment priming may actually be due to the priming of attachment strength rather than security. It is likely that the two dimensions of attachment strength and attachment security play different roles in the attachment system. Specifically, attachment strength should be associated with the significant others an individual turns to when threatened or needing help, whereas attachment security should be associated with the extent to which reminding individuals of

these relationships (e.g., through priming) can result in greater feelings of security and other positive outcomes that accrue from interpersonal security. Future studies are needed to further examine this distinction.

One limitation to our study was that it was completely based on participant self-report. As such, global traits such as optimism or neuroticism could have colored participants' responses both of their relationships and of their own experiences. However, if this was truly the case, we would have expected people who described themselves as anxious to be particularly "negative" in rating their experiences in relationships, which was not the case in our study.

Another limitation of the study was the focus on young adults and predominantly female participants. Young adulthood is a time of transition in a person's attachment system, including shifts in attachment functions from parents and friends to romantic others (Hazan & Zeifman, 1994). It will be important to replicate the present study with an older population with long-term stable attachment figures to determine whether the prevalence and consequences of having insecure attachment figures remain constant. It is not obvious whether the prevalence rate of insecure attachment figures would decrease or increase later in adulthood. One might imagine that individuals winnow away low quality relationships that elicit insecurity. However, we know that adult romantic relationships have a high failure rate and many that persist are suboptimal in intimacy and social support. It is possible that because of the wide range of social contacts at university, chronically insecure individuals stumble upon some social relationships that elicit security but that these relationships are not sustained, while those that elicit insecurity consistent with their chronic expectations and patterns of behavior are the ones that are sustained. Scaffolding attachment strength and security onto longitudinal studies of marriage may provide some insight into stability and change of attachment relationships.

Overall, this study has shown that a significant proportion of attachment bonds can be characterized by insecurity, which has consequences both for the extent to which these attachment figures can fulfill important attachment functions, and for overall well-being. These results could have important implications for attachment research. In reminding the field that the strength of the attachment bond can be distinguished from attachment security, we hope to fuel a new wave of research looking at the correlates of these distinct dimensions.

Funding

This research was supported by a grant from the Social Sciences and Humanities Research Council of Canada (SSHRC) to John E. Lydon. Marina Milyavskaya was supported by a doctoral fellowship from SSHRC.

Notes

1. We solicited nominations of autonomy supportive others and acquaintances to be able to address a secondary question about the distinction between fulfillment of attachment functions and provision of autonomy support, which is not relevant to the present article. However, we include these two categories in the present analyses, as they allow us to validate whether

attachment figures assessed with the WHOTO elicit greater ratings of attachment function fulfillment than other types of people in one's social network.
2. The results for each of the functions examined separately were significant at $p < .01$.
3. This was significant even when we controlled for attachment function fulfillment in the analyses.

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