

ARTICLE

Associations of attachment avoidance and anxiety with life satisfaction, satisfaction with singlehood, and desire for a romantic partner

Geoff MacDonald | Yoobin Park

Department of Psychology, University of Toronto, Toronto, Ontario, Canada

Correspondence

Geoff MacDonald, Department of Psychology, University of Toronto, 100 St. George St., Toronto, ON M5S 3G3 Canada.
Email: gmacdonald@psych.utoronto.ca

Abstract

Living single is becoming increasingly common worldwide and understanding within-group predictors of well-being among singles is becoming a stronger research priority. Although Pepping, MacDonald, and Davis suggested individual differences in attachment security may be useful for predicting singles' well-being, there are no published data on the issue. In this research, single participants ($N = 1930$; 49% men; $M_{\text{age}} = 31$ years; 75% White) completed measures of attachment security as well as measures of life satisfaction, satisfaction with singlehood, and desire for a romantic partner. The data suggested that higher levels of attachment avoidance and attachment anxiety were both associated with lower levels of life satisfaction as well as satisfaction with singlehood. However, when controlling for life satisfaction, attachment avoidance was not associated with satisfaction with singlehood. We also found that higher levels of attachment avoidance were associated with less desire for a romantic partner whereas higher levels of attachment anxiety were associated with stronger desire for a partner. Our

Statement of Relevance: Living single is becoming increasingly common worldwide. Pepping, MacDonald, and Davis (2018) suggested individual differences in attachment security may be useful for predicting singles' well-being. This research provides the first data linking individual differences in attachment security to satisfaction with singlehood.

findings suggest that individual differences in attachment security may indeed be useful in predicting well-being-related outcomes for singles.

KEYWORDS

attachment, other, personality

1 | INTRODUCTION

Living single, without a romantic partner, is becoming increasingly common in multiple parts of the world (OECD, 2019; Ortiz-Ospina, 2019). For example, over the last 40 years, the percentage of the US adult population that is unmarried (divorced, widowed, or never married) has risen from 28% to almost 44% (U.S. Census Bureau, 2017). In a nationally representative survey of American adults in 2019 (Brown, 2020), half of those who were not in a marital or committed relationship reported not currently looking for a relationship or dates. As another way to look at the increasing prevalence of singlehood, one-person households are becoming the most common living arrangement in countries such as Canada (Tang et al., 2019). Although living alone does not necessarily mean being without a romantic partner, two-thirds of Canadian solo dwellers reported not being in a committed relationship (Tang et al., 2019). Overall, these numbers suggesting a growing number of people living single (i.e., unpartnered) have motivated researchers to increase their understanding of single individuals' lives.

In assessing the experience of living single, one psychological outcome that seems important to examine is single individuals' subjective well-being, and one important indicator of well-being is life satisfaction (Diener et al., 1999). Arguably, most research aimed at examining the lives of single individuals has focused on comparing singles' life satisfaction to that of individuals in romantic relationships and has supported the conclusion that individuals in romantic relationships are, on average, higher in life satisfaction than those who are single (e.g., Stahnke & Cooley, 2021). However, recent work has challenged the notion that individuals cannot be simultaneously long-term single as well as healthy and happy and has pointed researchers to the importance of within-group variability among singles (e.g., DePaulo, 2017). Thus, attention to predictors of life satisfaction that may be particularly relevant to single individuals' lives appears important in this context.

As life satisfaction is associated with feeling satisfied in various life domains (Cummins, 1996; Rojas, 2006), it seems reasonable that satisfaction in the domain of singlehood may predict life satisfaction. Indeed, satisfaction with being single is associated with higher life satisfaction (Lehmann et al., 2015). Further, Oh et al. (2021) demonstrated a bidirectional effect such that feeling more satisfied with singlehood predicted higher life satisfaction and vice-versa. As such, feeling satisfied with being single may be one useful indicator of singles' overall life satisfaction and thus well-being. Another variable that appears to be related to well-being for singles is the extent to which they desire a romantic partner. In general, the desire to have something that one does not have is related to lower levels of well-being (e.g., Hardin & Larsen, 2014; Larsen & McKibban, 2008; Park & MacDonald, in press). As Kislev (2021) has shown that reductions in desire for a partner over time are associated with increases in singles' life satisfaction, it would appear that assessments of singles' desire for a romantic partner may also be a useful indicator of overall well-being.

Pepping et al. (2018) argued that one theoretical framework that may be valuable for understanding well-being in singlehood is attachment theory (Bowlby, 1969). Attachment theory postulates that as a result of developmental histories of support seeking that vary in degree of the attainment of support, individuals develop working models or social expectations that influence how they perceive and react to close relationships (Shaver & Mikulincer, 2002). Although the degree of contribution of childhood experiences is perhaps not as strong as conveyed by the original theory (Fraley & Roisman, 2019), what is clear is that adults demonstrate reliable individual differences in attachment security along dimensions of attachment avoidance and anxiety (Crowell et al., 2016). Individuals higher on the dimension of attachment avoidance value self-reliance, deprioritize close relationships, and at least outwardly display relatively low levels of emotionality. Individuals higher on the dimension of attachment anxiety experience relatively high levels of negative emotion, tend to feel needy and dependent on close relationships, but have feelings of lower self-worth that lead to hesitation in approaching closeness due to fears of rejection (Shaver & Mikulincer, 2002). Pepping et al. (2018) argued that singles high in attachment avoidance may be relatively comfortable with singlehood because the intimacy demands of a romantic relationship can be bypassed when single, whereas singles high in attachment anxiety may be relatively uncomfortable with singlehood as a result of feeling like they lack the intimacy of a romantic companion. Individuals high in attachment security (i.e., low avoidance and low anxiety), Pepping et al. (2018) argue, may be relatively comfortable with singlehood because of their better-developed emotion regulation skills and comfort in meeting emotional needs through multiple relationship types.

Among individuals in romantic relationships, considerable research has examined the relations of attachment avoidance and anxiety to both life and relationship satisfaction (there does not appear to be a relationship equivalent of desire for a partner). This research suggests that both attachment avoidance and anxiety are negatively correlated with life satisfaction (e.g., Li et al., 2020; Molero et al., 2017). Further, a meta-analytic study suggests that both attachment avoidance and anxiety are negatively associated with relationship satisfaction (Candel & Turliuc, 2019). Where data are lacking, however, is on the relation between attachment (in) security and singles' well-being, particularly satisfaction with singlehood. Data on satisfaction with singlehood are especially important because, despite the seeming well-being advantage for individuals in relationships, research has suggested that a better predictor of well-being than the state of either being in a relationship or being single is subjective satisfaction with one's relationship status (Adamczyk, 2019; Lehmann et al., 2015).

The goal of the present research was to provide data linking individual differences in attachment security to satisfaction with singlehood and well-being more generally. We combined three existing datasets that were collected for other purposes to examine the relations between satisfaction with singlehood, desire for a romantic partner, as well as overall life satisfaction with attachment avoidance and anxiety. Of note, these analyses were not preregistered and were entirely exploratory.

2 | METHOD

2.1 | Participants and procedures

All participants were recruited for research on singlehood via Prolific and were required to be older than 18 (20 in one sample) and not involved in a romantic relationship to be eligible to

participate. Data collection took place between December 2020 and June 2021 during the COVID 19 pandemic and associated lockdowns. Unfortunately, we did not collect country of origin data, but Prolific largely recruits participants from North American and European countries. The final sample consisted of 1930 individuals (952 men, 971 women, 7 other) who were 30.76 years old on average ($SD = 11.94$). This sample size provides sufficient power ($>99\%$) to detect a small effect size ($f^2 = .02$) for our multiple regression analysis (G*Power; Faul et al., 2007). The majority of participants ($n = 1441$) identified as White (at least partly; multiple responses were allowed). There were 171 participants identifying as Latino/Hispanic, 89 as African, 81 as Middle Eastern, 63 as Eastern Asian, 46 as South Asian, 16 as Caribbean, and 98 as other. Most participants ($n = 1328$) reported having been involved in a romantic relationship before. Among those who had been in a relationship previously (and provided information; $n = 1323$), the average time since their last relationship was 3 years and 5 months ($SD = 7$ years and 10 months). Please see Table 1 for information on each sample. Participants completed a battery of questionnaires that included the following measures. This research was approved by the University of Toronto Research Ethics Board.

2.2 | Measures

2.2.1 | Attachment style

The Experiences in Close Relationships—Relationship Structures Questionnaire (Fraley et al., 2011) was used to assess relationship-general attachment styles. This scale consists of three items assessing attachment anxiety (e.g., “I often worry that other people do not really care for me”; $\alpha > .86$) and six items assessing attachment avoidance (e.g., “I prefer not to show others how I feel deep down.”; $\alpha > .80$). All items were assessed using 7-point scales ranging from 1 (*strongly disagree*) to 7 (*strongly agree*).

TABLE 1 Study and participant characteristics by sample

	Sample 1 ($n = 942$)	Sample 2 ($n = 500$)	Sample 3 ($n = 489$)
Data collection	December 2020	January 2021	June 2021
Gender	463 M, 473 W, 6 O	246 M, 254 W	243 M, 245 W, 1 O
Age	37.76 (11.65)	24.78 (8.72)	23.40 (6.24)
Age range	20–75	18–74	18–71
Sexual orientation	81% heterosexual	79% heterosexual	77% heterosexual
Ethnicity	80% White	75% White	63% White
Dating history	75% experienced	62% experienced	63% experienced
Marital history	97% never married	—	75% never married
Time since last relationship (TLR)	4 y 2 m (5 y 6 m)	2 y 4 m (2y 9 m)	2 y (2y 3 m)
TLR range	1 m–42 y	1 m–25 y	2 wk–20 y

Note: Means are presented for age and time since last relationship with standard deviations in parentheses. Multiple responses were allowed for the ethnicity question. Dating history refers to participants' response to a question if they have ever been in a romantic relationship.

Abbreviations: M, men; m, months; O, other; W, women; wk, weeks; y, years.

2.2.2 | Satisfaction with singlehood

Satisfaction with singlehood was assessed using Lehmann et al.'s (2015) scale consisting of five items such as “In general, how satisfied are you with your current status?” ($\alpha > .89$). Participants are instructed to think about their current relationship status (i.e., being single) when responding to the items of this scale. All items were assessed using 4-point scales ranging from 1 (*not at all*) to 4 (*to a great extent*).

2.2.3 | Life satisfaction

Life satisfaction was assessed using the Satisfaction with Life Scale consisting of five items such as “I am satisfied with my life” (Diener et al., 1985; $\alpha > .87$). All items were rated on 7-point scales ranging from 1 (*strongly disagree*) to 7 (*strongly agree*).

2.2.4 | Desire for a partner

Desire for a partner was assessed using five items such as “I want to have a romantic partner” ($\alpha > .92$). This scale was developed in a previous study in the first author's lab and its validity has been supported in follow-up studies in which moderate to high associations were found with variables such as fear of being single (i.e., greater desire for a partner is associated with greater fear of being single; Spielmann et al., 2013) and commitment readiness (i.e., greater desire for a partner is associated with greater commitment readiness; Hadden et al., 2018). All items were rated on 7-point scales ranging from 1 (*strongly disagree*) to 7 (*strongly agree*).

2.3 | Analytic plan

We followed the Integrative Data Analysis (IDA) approach (Curran & Hussong, 2009) and pooled raw data from three samples. Prior to conducting analyses using this unified dataset, we created commensurate scores for each scale. Specifically, we conducted moderated nonlinear factor analysis (MNLFA; Curran et al., 2014) to generate factor score estimates that account for potential sample and gender differences in measurement properties. MNLFA combines traditional factor analysis and item response theory and allows the covariates (sample and gender) to influence the mean and variance of the latent factors as well as factor loadings and intercepts of the items. After simultaneously testing the impact and differential item functioning effects, the final model only retains the significant effects. Our final models for each construct indeed showed significant differences across sample membership and gender. For example, in terms of differences in factor means, compared to Sample 1, Samples 2 and 3 scored higher on attachment anxiety and higher on life satisfaction as well as satisfaction with singlehood; Sample 2 also scored higher than Sample 1 on desire for a partner. Women (vs. men) scored higher on attachment anxiety, lower on attachment avoidance, higher on satisfaction with singlehood, and lower on desire for a partner. We used factor score estimates obtained from the final models for the subsequent analyses.

To examine how attachment styles are associated with each of the outcomes of interest, we fit a series of regression models, including attachment anxiety and avoidance as predictors.

Gender and age as well as dummy variables for sample membership (Curran & Hussong, 2009) were included as control variables. In this fixed-effects IDA approach, we assume that including the set of study membership variables removes potential between-sample sources of variability from the model. However, we can also test for sample differences in the effects of interest by including interactions between sample membership and each of the effects. As we noted in Tables 2 and 3, all our reported results are from models that included both the dummy variables for study membership and their interactions with attachment insecurity. Note that the main effects of attachment anxiety and avoidance do not change whether interaction terms are included or not. There was some evidence that some of the effects varied across sample, but we did not focus on these differences as there were differences in magnitude rather than significance (which are hard to interpret as samples differed on multiple factors; see Table 1).¹

Following a model predicting satisfaction with singlehood, we also ran the same model controlling for life satisfaction to examine how attachment styles are associated with satisfaction with singlehood above and beyond their links with global life satisfaction. All continuous variables were centered prior to analyses. We also conducted two exploratory analyses for each outcome, testing (a) whether there is an interaction between attachment anxiety and avoidance, and (b) whether there is an interaction between attachment styles and gender. All analyses were conducted in R (R Core Team, 2019) and Mplus version 8 (Muthén & Muthén, 1998-2017). We used the *aMNLFA* package (Gottfredson et al., 2019) to generate syntax for the MNLFA.

3 | RESULTS

3.1 | Correlational analyses

As presented in Table 2, across the samples, attachment anxiety was significantly associated with lower levels of satisfaction with singlehood and life satisfaction as well as greater desire for a partner (but not significantly in one sample). Attachment avoidance was also significantly associated with lower levels of satisfaction with singlehood and life satisfaction as well as being linked with lower desire for a partner (not significantly in one sample). Satisfaction with singlehood was moderately associated with higher life satisfaction and lower desire for a partner. Life satisfaction and desire for a partner showed no significant association in two of the datasets.

3.2 | Regression analyses

3.2.1 | Life satisfaction

As shown in the first column in Table 3, both attachment anxiety and avoidance showed a unique negative association with global life satisfaction even when simultaneously included in a regression model. That is, individuals higher in either form of attachment insecurity were less satisfied with their life overall. Neither an interaction between attachment anxiety and avoidance nor interactions between attachment styles and gender emerged as significant.

TABLE 2 Correlations between study variables across samples

	Sample 1 (n = 941)					Sample 2 (n = 500)					Sample 3 (n = 489)				
	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
1. Anxiety	—					—					—				
2. Avoidance	0.07*	—				0.15**	—				0.11*	—			
3. Single sat.	-0.37**	-0.11**	—			-0.28**	-0.18**	—			-0.27**	-0.14**	—		
4. Life sat.	-0.35**	-0.27**	0.51**	—		-0.28**	-0.34**	0.56**	—		-0.24**	-0.22**	0.52**	—	
5. Desire	0.28**	-0.12**	-0.54**	-0.09**	—	0.11*	-0.10*	-0.43**	-0.08	—	0.08	-0.03	-0.44**	-0.05	—
M	4.19	3.97	2.39	3.33	4.13	4.68	3.92	2.55	3.74	4.73	4.65	4.06	2.48	3.61	4.37
SD	1.60	1.20	0.84	1.41	1.68	1.54	1.12	0.76	1.34	1.48	1.75	1.12	0.80	1.37	1.57

Note: Possible scores range from 1 to 7 for all variables.

Abbreviations: Anxiety, attachment anxiety; Avoidance, attachment avoidance; Desire, desire for a partner; Life sat., life satisfaction; Single sat., satisfaction with singlehood.

* $p < .05$, ** $p < .01$.

TABLE 3 Attachment styles predicting satisfaction with singlehood and life satisfaction

	Life satisfaction			Satisfaction with singlehood			Satisfaction with singlehood			
	<i>b</i>	β	<i>t</i>	<i>b</i>	β	<i>t</i>	<i>B</i>	β	<i>t</i>	<i>p</i>
Gender	0.10	.05	2.42	0.46	.24	11.40	0.40	.22	11.30	<.001
Age	-0.01	-.10	-4.03	-0.00	-.01	-0.27	0.00	.04	1.83	.07
Attachment anxiety	-0.40	-.43	-13.10	-0.40	-.42	-12.80	-0.21	-.22	-7.21	<.001
Attachment avoidance	-0.23	-.23	-8.10	-0.06	-.06	-2.24	0.04	.04	1.58	.12
Life satisfaction							0.46	.46	22.30	<.001

Note: *N* = 1930. Gender was coded as 1 = men and 2 = women. Dummy variables denoting sample membership (reference = Sample 1) and their interactions with attachment variables are included in all models (Curran & Hussong, 2009).

3.2.2 | Satisfaction with singlehood

With satisfaction with being single as an outcome (see the second column of Table 3), we found a similar pattern of results as in the life satisfaction model such that individuals higher in either form of attachment insecurity were less satisfied with the status of being single. However, in a model additionally controlling for life satisfaction (see the third column of Table 3), we found that the (relatively weak) effect of attachment avoidance dropped to nonsignificance. This suggests that to the extent that avoidantly attached individuals reported lower levels of satisfaction with being single, this was reflecting their dissatisfaction with life, in general, rather than feelings specific to singlehood. In contrast, the effect of attachment anxiety remained significant in this model, suggesting anxiously attached individuals felt less satisfied about being single even when their dissatisfaction with life was accounted for. Neither of the two moderation analyses showed a significant interaction effect.

3.2.3 | Desire for a partner

With desire for a partner as an outcome (see Table 4), we found a somewhat different pattern than with the other dependent measures: Attachment anxiety was associated with greater desire for a partner whereas attachment avoidance was associated with less desire for a partner. Although the interaction between attachment anxiety and avoidance was not significant, the additive effects of the main effects of attachment anxiety and avoidance suggest that individuals low in anxiety and high in avoidance (i.e., dismissives; see Gillath et al., 2016) would have the least desire for a partner. Conversely, individuals high in anxiety and low in avoidance (i.e., preoccupied) should have the highest desire for a partner.

4 | DISCUSSION

Our data support Pepping et al.'s (2018) proposition that individual differences in attachment security may be useful in understanding singlehood. As with those in romantic relationships (Molero et al., 2017), singles who were higher in attachment avoidance were lower in life satisfaction. However, despite reporting less overall satisfaction with their lives, more avoidant individuals did not appear particularly dissatisfied with singlehood itself. When accounting for the negative association between avoidance and life satisfaction, there was not a significant remaining relation between avoidance and satisfaction with singlehood. Further, higher levels

TABLE 4 Attachment styles predicting desire for partner

	<i>b</i>	<i>B</i>	<i>t</i>	<i>p</i>
Gender	−0.46	−.23	−10.30	<.001
Age	−0.01	−.08	−2.88	.004
Attachment anxiety	0.30	.30	8.94	<.001
Attachment avoidance	−0.15	−.15	−4.96	<.001

Note: *N* = 1930. Gender was coded as 1 = men and 2 = women. Dummy variables denoting sample membership (reference = Sample 1) and their interactions with attachment variables are included in all models (Curran & Hussong, 2009).

of avoidance were associated negatively with desire for a romantic partner. That is, more avoidant singles appeared less interested than their less avoidant counterparts in changing their relationship status. Additive main effects suggest that it may be particularly those who are in categorical terms would be deemed dismissive (i.e., high avoidance, low anxiety; Bartholomew & Horowitz, 1991) who are most disinterested in romantic partnership. On the other hand, higher levels of attachment anxiety were associated with lower life satisfaction, less satisfaction with singlehood, and more desire for a romantic partner. We comment below on these patterns, but because the data analysis was completely exploratory, our conclusions (despite being theoretically informed) are completely post-hoc.

The data for attachment avoidance suggest that although singles higher in avoidance are less happy overall than those lower in avoidance, they are not unhappy with singlehood per se and (especially for those low in attachment anxiety) are not particularly motivated to stop being single. Thus, despite cultural narratives suggesting the importance of romantic relationships for healthy adult functioning (e.g., Day et al., 2011), more avoidant individuals do not appear strongly motivated to partner romantically. Indeed, higher levels of attachment avoidance are associated with lower expectations for intimacy in romantic relationships (Spielmann et al., 2013), higher expectations for relationship failure (Birnie et al., 2009), and less satisfaction in romantic relationships (Candel & Turliuc, 2019) so it is perhaps not surprising that more avoidant singles may not see romantic relationships as a strongly enticing proposition. As such, value placed on singlehood by those higher in attachment avoidance may result not so much from enjoyment of singlehood itself but from singlehood's potential to relieve avoidant individuals of the difficulties they may believe a relationship would bring (e.g., Girme et al., 2016).

However, some research has suggested that avoidants can benefit from intimate experiences in romantic relationships such as touch, social support, and self-disclosure particularly when partners are sensitive to avoidants' autonomy needs and provide messages of caring that complement avoidants' interpersonal style (Debrot et al., 2020; Girme et al., 2016; Overall et al., 2013; Schrage et al., 2020; Stanton et al., 2017). In this way, avoiding romantic relationships for those high in attachment avoidance may be like avoiding exercise for many people; the short-term desire to bypass discomfort may lead to missing experiences that build well-being over the longer term. Future longitudinal research beginning in singlehood would be particularly useful for examining whether avoidant singles are justified in any doubts that entering a romantic relationship is a means for improving well-being, or as attachment theory suggests, whether such doubts are defenses against pursuing healing, but uncomfortable, intimate experiences (Shaver & Mikulincer, 2002). Further, although the benefits described here can in many ways be attained in nonromantic relational contexts, future research could focus on the challenges attachment theory suggests avoidants may face in building social networks outside of a romantic context that may help in understanding lower well-being for avoidant singles (e.g., Gillath et al., 2017).

Arguably, the data for attachment anxiety are more straightforward. Consistent with the picture of attachment anxiety being associated with chronic negative affect and feelings of needy dependence on others (Cantazaro & Wei, 2010), attachment anxiety was associated with lower life satisfaction, lower satisfaction with singlehood, and stronger desire for a romantic partner. That is, more anxiously attached individuals appeared less happy with their lives, less happy with singlehood, and more eager to change their relationship status. Although data directly on this issue are needed, it seems reasonable to suggest that individuals higher in attachment anxiety may attribute at least some of their relatively low life satisfaction to singlehood and the lack of a romantic partner (e.g., fear of being single; Spielmann et al., 2013). The lack of longitudinal

data beginning in singlehood makes it unclear whether more highly anxious singles who get into a romantic relationship actually do experience a sustainable boost to their life satisfaction by partnering. Unfortunately, anxiously attached individuals who get into relationships tend to continue to be relatively low in life satisfaction (Molero et al., 2017) and relationship satisfaction (Candel & Turliuc, 2019) relative to those lower in attachment anxiety. Thus, it appears that some degree of the negative affect that troubles anxiously attached individuals in singlehood carries with them to their romantic relationships (although there is some evidence of at least short term relief from anxiety following partnering; Fraley et al., 2020), and as such more anxiously attached singles may be well served by focusing on strategies to manage chronic negative emotion such as therapy (Roberts et al., 2017) in addition to/instead of finding a romantic partner.

The present data are also consistent with Pepping et al.'s (2018) contention that one group that may fare well as singles are those who are more securely attached. In our analyses, individuals relatively low in anxiety and avoidance (i.e., *secures*; Bartholomew & Horowitz, 1991) appeared to be relatively high in life satisfaction and satisfaction with singlehood and moderately interested in transitioning to a romantic relationship. Pepping et al. (2018) suggested that more secure individuals, with their ability to manage their negative emotion and comfort in relating to others, may be relatively successful at meeting needs for connection and support through means other than romantic relationships. Given that connection can come from many different kinds of relationships, it is possible that secure singles are particularly effective in meeting social and emotional needs through friends, families, and other social networks (Gillath et al., 2017). The current correlational data are consistent with this supposition, but data on the social and other pursuits of secure singles are needed.

Although we have fulfilled our goal of providing some information about links between attachment (in)security and satisfaction with singlehood, the correlational nature of the data is just one limitation. The dataset provides a reasonable degree of power, but of course would benefit from replication. Further, because the data were collected during COVID lockdowns, which may have been particularly challenging for individuals living alone (Sisson et al., *in press*), it may be important to replicate these findings when lockdown conditions have passed. In addition, although we were able to control for general life satisfaction in examining relations with satisfaction with singlehood, it is also well established that individual differences in attachment security have nontrivial links with more general personality traits (e.g., Donnellan et al., 2008). Thus, future research would do well to examine the extent to which the effects found in the current research are accounted for by attachment security specifically as opposed to personality traits such as agreeableness and neuroticism. In addition, although our study focuses on single individuals in order to address the lack of descriptive, within-group data for singles, without a comparison group of individuals in relationships we cannot and do not claim that our results are unique to those who are single (see Park & MacDonald, *in press*, for an example of singlehood dynamics that are mirrored by individuals in relationships). Thus, future research examining data from both singles and individuals in relationships would be beneficial for being able to make claims about the uniqueness or universality of our results. Finally, our research participants were largely from Europe and North America, and thus our results cannot be generalized to other parts of the world which hold different norms for both singlehood and relationships.

In sum, we believe our data affirm the value of the examination of within-group variability among singles using individual differences in attachment security. Such analyses allow researchers to move past the question of whether it is singles versus people in relationships

who are the higher functioning group and to examine instead who among the increasing population of singles is likely to be struggling and who is likely to be thriving.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available on request from the corresponding author Geoff MacDonald: gmacdonald@psych.utoronto.ca.

ENDNOTE

¹ One exception was an interaction between attachment anxiety and attachment avoidance predicting desire for a partner, which was significant but dropped in significance when the interactions between attachment and sample membership were included in the model. Full results can be found in Appendix S1.

REFERENCES

- Adamczyk, K. (2019). Development and validation of a polish-language version of the satisfaction with relationship status scale (ReSta). *Current Psychology, 38*, 8–20.
- Bartholomew, K., & Horowitz, L. M. (1991). Attachment styles among young adults: A test of a four-category model. *Journal of Personality and Social Psychology, 61*, 226–224.
- Birnie, C., Joy McClure, M., Lydon, J. E., & Holmberg, D. (2009). Attachment avoidance and commitment aversion: A script for relationship failure. *Personal Relationships, 16*, 79–97.
- Bowlby, J. (1969). *Attachment and loss* (Vol. 1). Basic Books.
- Brown, A. (2020). Nearly half of U.S. adults say dating has gotten harder for most people in the last 10 years. Pew Research Center. <https://www.pewresearch.org/social-trends/2020/08/20/nearly-half-of-u-s-adults-say-dating-has-gotten-harder-for-most-people-in-the-last-10-years/>
- Candel, O. S., & Turluc, M. N. (2019). Insecure attachment and relationship satisfaction: A meta-analysis of actor and partner associations. *Personality and Individual Differences, 147*, 190–199.
- Cantazaro, A., & Wei, M. (2010). Adult attachment, dependence, self-criticism, and depressive symptoms: A test of a mediational model. *Journal of Personality, 78*, 1135–1162.
- Crowell, J. A., Fraley, R. C., & Roisman, G. I. (2016). Measurement of individual differences in adult attachment. In J. Cassidy & P. R. Shaver (Eds.), *Handbook of attachment: Theory, research, and clinical applications* (pp. 598–635). Guilford Press.
- Cummins, R. A. (1996). The domains of life satisfaction: An attempt to order chaos. *Social Indicators Research, 38*, 303–328.
- Curran, P. J., & Hussong, A. M. (2009). Integrative data analysis: The simultaneous analysis of multiple data sets. *Psychological Methods, 14*, 81–100.
- Curran, P. J., McGinley, J. S., Bauer, D. J., Hussong, A. M., Burns, A., Chassin, L., Sher, K., & Zucker, R. (2014). A moderated nonlinear factor model for the development of commensurate measures in integrative data analysis. *Multivariate Behavioral Research, 49*, 214–231.
- Day, M. V., Kay, A. C., Holmes, J. G., & Napier, J. L. (2011). System justification and the defense of committed relationship ideology. *Journal of Personality and Social Psychology, 101*, 291–306.
- Debrot, A., Stellar, J. E., MacDonald, G., Keltner, D., & Impett, E. A. (2020). Is touch in romantic relationships universally beneficial for psychological well-being? The role of attachment avoidance. *Personality and Social Psychology Bulletin, 0146167220977709*.
- DePaulo, B. (2017). Toward a positive psychology of single life. In D. Dunn (Ed.), *Positive psychology: Established and emerging issues* (pp. 251–275). Routledge.
- Diener, E., Suh, E. M., Lucas, R. E., & Smith, H. L. (1999). Subjective well-being: Three decades of progress. *Psychological Bulletin, 125*, 276–302.
- Diener, E. D., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The satisfaction with life scale. *Journal of Personality Assessment, 49*, 71–75.
- Donnellan, M. B., Burt, S. A., Levendosky, A. A., & Klump, K. L. (2008). Genes, personality, and attachment in adults: A multivariate behavioral genetic analysis. *Personality and Social Psychology Bulletin, 34*, 3–16.

- Faul, F., Erdfelder, E., Lang, A.-G., & Buchner, A. (2007). G* power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavior Research Methods*, *39*, 175–191.
- Fraley, R. C., Gillath, O., & Deboeck, P. R. (2020). Do life events lead to enduring changes in adult attachment styles? A naturalistic longitudinal investigation. *Journal of Personality and Social Psychology*, *120*, 1567–1606.
- Fraley, R. C., Heffernan, M. E., Vicary, A. M., & Brumbaugh, C. C. (2011). The experiences in close relationships—Relationship structures questionnaire: A method for assessing attachment orientations across relationships. *Psychological Assessment*, *23*, 615–625.
- Fraley, R. C., & Roisman, G. I. (2019). The development of adult attachment styles: Four lessons. *Current Opinion in Psychology*, *25*, 26–30.
- Gillath, O., Karantzas, G. C., & Fraley, R. C. (2016). *Adult attachment: A concise introduction to theory and research*. Academic Press.
- Gillath, O., Karantzas, G. C., & Selcuk, E. (2017). A net of friends: Investigating friendship by integrating attachment theory and social network analysis. *Personality and Social Psychology Bulletin*, *43*, 1546–1565.
- Girme, Y. U., Overall, N. C., Faingataa, S., & Sibley, C. G. (2016). Happily single: The link between relationship status and well-being depends on avoidance and approach social goals. *Social Psychological and Personality Science*, *7*, 122–130.
- Gottfredson, N. C., Cole, V. T., Giordano, M. L., Bauer, D. J., Hussong, A. M., & Ennett, S. T. (2019). Simplifying the implementation of modern scale scoring methods with an automated R package: Automated moderated nonlinear factor analysis (aMNLFA). *Addictive Behaviors*, *94*, 65–73.
- Hadden, B. W., Agnew, C. R., & Tan, K. (2018). Commitment readiness and relationship formation. *Personality and Social Psychology Bulletin*, *44*, 1242–1257.
- Hardin, E. E., & Larsen, J. T. (2014). Distinct sources of self-discrepancies: Effects of being who you want to be and wanting to be who you are on well-being. *Emotion*, *14*, 214–226.
- Kislev, E. (2021). Reduced relationship desire is associated with better life satisfaction for singles in Germany: An analysis of pairfam data. *Journal of Social and Personal Relationships*, 02654075211005024.
- Larsen, J. T., & McKibban, A. R. (2008). Is happiness having what you want, wanting what you have, or both? *Psychological Science*, *19*, 371–377.
- Lehmann, V., Tuinman, M. A., Braeken, J., Vingerhoets, A. J., Sanderman, R., & Hagedoorn, M. (2015). Satisfaction with relationship status: Development of a new scale and the role in predicting well-being. *Journal of Happiness Studies*, *16*, 169–184.
- Li, X., Curran, M. A., LeBaron, A. B., Serido, J., & Shim, S. (2020). Romantic attachment orientations, financial behaviors, and life outcomes among young adults: A mediating analysis of a college cohort. *Journal of Family and Economic Issues*, 1–14.
- Molero, F., Shaver, P. R., Fernández, I., & Recio, P. (2017). Attachment insecurities, life satisfaction, and relationship satisfaction from a dyadic perspective: The role of positive and negative affect. *European Journal of Social Psychology*, *47*, 337–347.
- Muthén, L. K., & Muthén, B. O. (1998–2017). *Mplus user's guide* (Eighth ed.). Muthén & Muthén.
- OECD. (2019). SF3.1: Marriage and divorce rates. Retrieved from https://www.oecd.org/els/family/SF_3_1_Marriage_and_divorce_rates.pdf
- Oh, J., Chopik, W. J., & Lucas, R. E. (2021). Happiness singled out: Bidirectional associations between singlehood and life satisfaction. *Personality and Social Psychology Bulletin*. <https://doi.org/10.1177/01461672211049049>
- Ortiz-Ospina, E. (2019). The rise of living alone: How one-person households are becoming increasingly common around the world. Our World in Data. <https://ourworldindata.org/living-alone>
- Overall, N. C., Simpson, J. A., & Struthers, H. (2013). Buffering attachment-related avoidance: Softening emotional and behavioral defenses during conflict discussions. *Journal of personality and social psychology*, *104*, 854.
- Park, Y., & MacDonald, G. (in press). Single and partnered individuals' sexual satisfaction as a function of sexual desire and activities: Results using a sexual satisfaction scale demonstrating measurement invariance across partnership status. *Archives of Sexual Behavior*.
- Pepping, C. A., MacDonald, G., & Davis, P. J. (2018). Toward a psychology of singlehood: An attachment-theory perspective on long-term singlehood. *Current Directions in Psychological Science*, *27*, 324–331.
- R Core Team. (2019). *R: A language and environment for statistical computing*. R Foundation for Statistical Computing.

- Roberts, B. W., Luo, J., Briley, D. A., Chow, P. I., Su, R., & Hill, P. L. (2017). A systematic review of personality trait change through intervention. *Psychological Bulletin, 143*, 117–141.
- Rojas, M. (2006). Life satisfaction and satisfaction in domains of life: Is it a simple relationship? *Journal of Happiness Studies, 7*, 467–497.
- Schrage, K. M., Maxwell, J. A., Impett, E. A., Keltner, D., & MacDonald, G. (2020). Effects of verbal and nonverbal communication of affection on avoidantly attached partners' emotions and message receptiveness. *Personality and Social Psychology Bulletin, 46*, 1567–1580.
- Shaver, P. R., & Mikulincer, M. (2002). Attachment-related psychodynamics. *Attachment & Human Development, 4*, 133–161.
- Sisson, N. M., Willroth, E. C., Le, B. M. & Ford, B. Q. (in press). The benefits of living with close others: A longitudinal examination of mental health before and during a global stressor. *Clinical Psychological Science*.
- Spielmann, S. S., MacDonald, G., Maxwell, J. A., Joel, S., Peragine, D., Muise, A., & Impett, E. A. (2013). Settling for less out of fear of being single. *Journal of Personality and Social Psychology, 105*, 1049–1073.
- Stahnke, B., & Cooley, M. (2021). A systematic review of the association between partnership and life satisfaction. *The Family Journal, 29*, 182–189.
- Stanton, S. C., Campbell, L., & Pink, J. C. (2017). Benefits of positive relationship experiences for avoidantly attached individuals. *Journal of Personality and Social Psychology, 113*, 568.
- Tang, J., Galbraith, N., & Truong, J. (2019). Living alone in Canada (CS75-006/2019-3E-PDF). Retrieved from http://publications.gc.ca/collections/collection_2019/statcan/75-006-x/75-006-2019-3-eng.pdf
- U.S. Census Bureau. (2017). Table AD-3. Living arrangements of adults 18 and over, 1967 to present. Retrieved from <https://www2.census.gov/programs-surveys/demo/tables/families/time-series/adults/ad3.xls>

SUPPORTING INFORMATION

Additional supporting information may be found in the online version of the article at the publisher's website.

How to cite this article: MacDonald, G., & Park, Y. (2022). Associations of attachment avoidance and anxiety with life satisfaction, satisfaction with singlehood, and desire for a romantic partner. *Personal Relationships, 29*(1), 163–176. <https://doi.org/10.1111/pere.12416>