

# Testing the Dyadic-Withdrawal Hypothesis in College Students

NICHOLAS M. JAMES & HEIDI A. WAYMENT, PH. D.  
Northern Arizona University

The dyadic-withdrawal hypothesis (DWH) posits that the attention given by emerging adults to their friendships and romantic relationships are in competition. In samples of college students (nearly 90% female) who were single ( $n = 220$ ) or romantically involved ( $n = 227$ ), we examined the importance of friendship attachment and identity support during emerging adulthood. For all students, life satisfaction was negatively related to anxious and avoidant attachment to friends and positively related to friendship satisfaction and self-identity support. Relationship satisfaction and self-identity support from a romantic partner also predicted life satisfaction for romantically involved students. Although romantically involved students reported greater life satisfaction on average, single students reported greater friendship satisfaction and identity support from friends. Life satisfaction was highest among romantically involved students who reported greater friendship satisfaction and self-identity support. Our results suggest that the psychological benefits associated with friendships remain important even when romantically involved.

*Keywords:* dyadic-withdrawal hypothesis, friendship, romantic relationships, life satisfaction, attachment style

L'hypothèse du retrait dyadique (HRD) postule que l'attention accordée aux amis et aux relations amoureuses des jeunes adultes se font compétition. L'importance de l'attachement dans la relation d'amitié et le soutien à l'identité personnelle (SIP) pendant l'émergence de l'âge adulte ont été examinés auprès d'étudiants universitaires (environ 90% étant des femmes) célibataires ( $n = 200$ ) ou en relation ( $n = 227$ ). Chez tous, la satisfaction de vie était négativement corrélée aux styles d'attachement évitant et anxieux dans les relations amicales, mais était positivement corrélée à la satisfaction de l'amitié et au SIP. La satisfaction conjugale et le SIP d'un partenaire amoureux prédisaient également la satisfaction de vie chez ceux en relation. Malgré qu'en moyenne, ceux en relation rapportaient une plus grande satisfaction de vie, les célibataires rapportaient une plus grande satisfaction et de soutien à l'identité des amitiés. La satisfaction de vie était plus importante chez les étudiants en relation rapportant une plus grande satisfaction de l'amitié et de SIP. Nos résultats suggèrent que les bienfaits psychologiques associés à l'amitié demeurent importants même lorsqu'en relation.

*Mots-clés :* hypothèse du retrait dyadique, amitié, relations amoureuses, satisfaction de vie, style d'attachement.

Developmentally, college students are at the beginning of a phase called “emerging adulthood”, a phase of life characterized by identity exploration and confirmation. Friendships and romantic relationships are extremely important and contribute substantially to identity development and well-being during this time (Arnett, 2000; Chickering & Reisser, 1993; Diener & Seligman, 2002; Gustavson, Røysamb, Borren, Torvik, & Karevold, 2016; Hartup & Stevens, 1997; Rubin, Bukowski, & Parker, 2007). Researchers have often focused on how being involved in a romantic relationship may change how much friendships contribute to well-being (Levitt, Weber, & Clark, 1986). The dyadic-withdrawal hypothesis (DWH) is a good example of this emphasis. The DWH assumes a

zero-sum view of social involvement; that is, this theory is predicated on the idea that an individual's emotional, mental, and physical resources are limited. When a young adult becomes involved in a romantic relationship, the amount of time and energy they put into their friendships may diminish (Johnson & Leslie, 1982; Rawlins, 2000). Several studies have demonstrated that involvement in a romantic relationship negatively impacts the perceived importance of friendships (Carbery & Buhrmester, 1998; Clark & Graham, 2005; Collins & van Dulmen, 2006; Demir, 2010; Levitt et al., 1986). For example, when college students become involved in a romantic relationship, they spend fewer hours with their friends (Fischer, Sollie, Sorell, & Green, 1989; Johnson & Leslie 1982; Rosenfeld & Thomas, 2012), have smaller friendship networks (Kalmijn, 2003; Milardo, 1982), and, in some cases, friends become a less important predictor of happiness (Demir, 2010). Johnson and Leslie (1982) showed that some psychosocial factors of friendship (e.g., importance of

---

We gratefully acknowledge the early contributions of our lab colleagues Sarah Brown (email: srb358@nau.edu) and Kaila VanSumer (email: kjv36@nau.edu) for their assistance with data analysis and table creation on an earlier version of this paper. Please address all correspondence concerning this article to Nicholas M. James (email: nmj52@nau.edu).

friends' opinions and quantity of intimate disclosure) decrease when a romantic relationship begins to develop.

It may be premature to conclude that the benefits of friendships become less important when emerging adults become romantically involved. Very few studies have examined whether romantic involvement diminishes the psychosocial impacts of friendships on well-being. Friends provide important support for social identity, self-concept, as well as self-worth (Anthony & McCabe, 2015; Arnett, 2000; Lipka & Brinthaup, 1992) and fulfill emotional needs for connectedness and sense of belonging (Baumeister & Leary, 1995). Even if friends are not able to spend as much time with each other when romantically involved, friendships may still have a positive and important impact on young adults' self-identity and perceptions of worthiness, impacts that are not necessarily dependent of structural indicators of friendship. In our study, two psychosocial benefits that friends can provide were investigated: secure attachment and self-identity support, which are important for well-being. It has been found to be positively associated with having a secure attachment to one's friends (Daley & Hammen, 2002). Friends also provide an important source of information and support for identity exploration and formation during late adolescence (Chickering & Reisser, 1993). In the upcoming paragraphs, these two important resources that friends can provide are described in more details. Life satisfaction is considered by the vast majority of college students to be extremely important and has been demonstrated as a stable component of well-being (Diener, Suh, Lucas, & Smith, 1999). Thus, this study aims to examine whether these psychosocial benefits of friendships are differentially related to life satisfaction in single and romantically involved young adults.

### **Attachment Style to Friends**

The well-known literature on attachment style suggests that early and ongoing relationships with important people impact a person's view of themselves and others (Bowlby, 1969). Attachment styles were originally based on infants' reactions to separation and reunion with their mother (Ainsworth, Blehar, Waters, & Wall, 1978). Based on these interactions, a child comes to have working models of themselves and others. These views of self and others are important because they are believed to influence friendships, romantic relationships, and parenting styles (Bartholomew, 1993; Simpson, 1990). Views of self and others are combined to form three basic attachment styles: securely attached individuals feel valued and worthy of others' concern, support and affection; anxiously attached individuals have

negative self-views combined with a perception that others are undependable, and unwilling or unable to commit to long-term, intimate relationships; those with an avoidant attachment style have positive self-views but negative views of others (Collins & Feeney, 2000; Hazan & Shaver, 1987). Although attachment style is often measured in the context of romantic relationships (Trinke & Bartholomew, 1997), it can also be measured in the context of other relationships (Baldwin & Fehr, 1995; Cozzarelli, Hoekstra, & Bylsma, 2000; Kobak, 1994; Lewis, 1994; Ross & Spinner, 2001), including friendships (Caron, Lafontaine, Bureau, Levesque, & Johnson, 2012; Furman, Simon, Shaffer, & Bouchey, 2002; Schneider, Atkinson, & Tardif, 2001; Shaver, Belsky, & Brennan, 2000). The benefits of attachment security are considered fundamental to well-being, not only in late adolescence, but throughout the life span (Mikulincer & Florian, 1998). Consequently, it is important to investigate whether romantic involvement adversely impacts global attachment to friends.

### **Self-Identity Support**

Friendships provide important psychological needs related to self-identity development (Brooks, 2007), such as autonomy (i.e., sense of agency and purpose), competence (i.e., feelings of efficacy and self-confidence) and relatedness (i.e., feeling connected and cared for; Deci & Ryan, 1985). Weisz and Wood (2005), followed a group of college students from freshman through senior year and found that even after controlling for closeness, contact, and supportiveness of their friends, self-identity support was the most important predictor of well-being. For romantically involved students, self-identity support may be supplied by both friends and a romantic partner (LaGuardia, Ryan, Couchman, & Deci, 2000). Self-expansion theory (A. Aron, E. N. Aron, & Smollan, 1992) posits that romantic partners tend, over time, to incorporate (i.e., support) important aspects of the partner's identities, resources, and perspectives into his or her own self-concept (A. Aron, Lewandowski, Mashek, & E. N. Aron, 2013). Self-identity support from a romantic partner, as operationalized by self-expansion theory, is related to life satisfaction (A. Aron et al., 1992). However, to date, no study has examined the effect of romantic involvement on self-identity support and relationship satisfaction; operationalized in this study as FSSIS for friendships and RSSIS for romantic relationships.

### **Study Goals, Research Questions, and Hypotheses**

Our review of the literature suggested that although friendships can provide important psychosocial factors of well-being in young adults, such as attachment

## DYADIC-WITHDRAWAL HYPOTHESIS

security and self-identity support, no research has examined whether these resources are negatively impacted when a college student becomes romantically involved. This study sought to answer the following questions: does a young adult who is romantically involved still feel valued and supported by his or her friends? Do their friendships continue to provide satisfaction? If so, are these friendships benefits associated with life satisfaction? Or, do these types of psychological benefits also diminish in importance when romantically involved? Our goal was to examine whether two important psychosocial benefits of friendship (i.e., secure attachment to friends and friendship self-identity support) are differentially related to life satisfaction depending on whether one is romantically involved or not. Our hypotheses were as follow:

H1. We expected that for both single and romantically involved college students, anxious and avoidant attachment to friends would be negatively related to life satisfaction and that friendship satisfaction and self-identity support (FSSIS) would be positively related to life satisfaction.

H2A. In line with the dyadic-withdrawal hypothesis, we expected that single students would report higher levels of FSSIS than romantically involved college students.

H2B. Anxious and avoidant attachment to friends and FSSIS would be more strongly correlated with life satisfaction for single college students than for romantically involved college students.

H3. We expected that romantic satisfaction and self-identity support (RSSIS) would be positively related to life satisfaction for romantically involved college students.

H4. In line with the dyadic-withdrawal hypothesis, we expected that RSSIS would be more strongly correlated with life satisfaction than FSSIS or anxious and avoidant attachment in romantically involved students.

We also examined some exploratory research questions. The first concerns the level of life satisfaction among single and romantically involved students. Given the emphasis in the literature about the importance of romantic relationships for emerging adults, it could be that students who are romantically involved report greater life satisfaction. However, many have argued that the decision of being single is a legitimate choice (DePaulo & Morris, 2005). Roughly one quarter to one half of emerging adults are single, and the number continues to increase in the United States (DePaulo & Morris, 2005; Doherty & Feeney, 2004). Therefore, we decided to examine whether

relationship status is related to life satisfaction. Additionally, gender differences between how men and women experience friendships have been reported in previous research (Bank & Hansford, 2000). Therefore, we also examined whether there were any gender differences on all study variables in both of our samples of college students.

## Method

### Participants and Procedures

The questionnaire used in the study consisted of some standardized measures and some items that were created by members of the course with faculty supervision. Study methodology was approved by the university's institutional review board prior to data collection. Data were collected from college students participating in the introduction to psychology participant pool. After granting consent, participants completed an online survey for course credit. Participants ( $N = 459$ ; 87.7% female, 12.1% male) were between 18-22 years of age ( $M = 19$ ,  $SD = 1.98$ ).

### Materials

**Demographic information.** The questionnaire inquired about participants gender, age and relationship status. Participants could indicate their relationship status as single (1), single and dating (2), in a relationship (3), or engaged or married (4). Participants were stratified by their response to the relationship status question. "Single" and "single and dating" participants were considered "single", while participants who identified as "in a relationship" or "engaged or married" were considered to be "romantically involved." About half of the participants were considered single ( $n = 227$ ) and half were considered romantically involved ( $n = 232$ ).

**Attachment to friends.** Attachment to friends was assessed with the *Revised Adult Attachment Scale* (RAAS; Collins & Read, 1990). This 18-item scale was modified by using the words "friends" or "friend" instead of the word "others" or "another person." The 18 items were scored on a 5-point scale ranging from 1 (*not at all characteristic of me*) to 5 (*very characteristic of me*). Two attachment dimensions were created: anxious attachment to friends (model of self) and avoidant attachment to friends (model of others). Secure attachment reflects low anxious attachment and low avoidant attachment. Cronbach's alpha for anxiety attachment and avoidant attachment were .71 and .85, respectively.

**Friendship satisfaction and self-identity support (FSSIS).** This construct was assessed with five items. Two items ("*My social relationships are supportive and rewarding*" and "*I actively contribute to the*")

happiness and well-being of others”) were taken from the *Flourishing Scale* (Diener et al., 2009). Each item was rated on a 7-point scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). Three items were created for this study. The items asked respondents to assess how important friends were to his or her self-identity (1 = *not very important*; 7 = *very important*), how meaningful to his or her self-identity (1 = *not very meaningful*; 7 = *very meaningful*), and the extent to which one could be happy without his or her friends (1 = *could not be happy without*; 5 = *could be very happy without*; reversed). Given that the items were measured on different scales, the items were standardized and then summed to create a measure of friendship support for self-identity. Cronbach’s alpha for this measure was .71. Higher scores on this measure reflected the perception of friends being important and meaningful for one’s self-identity.

**Romantic satisfaction and self-identity support (RSSIS).** We assessed this construct by combining two scales. The *Relationship Assessment Scale* (RAS; Hendrick, 1988), is a 6-item scale that measures the perceived fulfillment in a romantic relationship. Each item was rated on a 5-point scale (1 = *low satisfaction*; 5 = *highly satisfied*). Sample items include “*In general, how satisfied are you with your relationship?*” and “*How much do you love your partner?*”. Cronbach’s alpha for this scale was .88. To measure self-identity support provided by a romantic partner, the *Inclusion of Other in Self Scale* (IOS; A. Aron et al., 1992) was used. We chose this measure because of its unique format for participants to estimate the extent to which they perceived self-identity overlap with a romantic partner’s (Gächter, Starmer, & Tufano, 2015). Respondents viewed a visual representation of various overlapping circles, ranging from separate circles to almost completely integrated circles, and rated which set of circles best represents their relationship with their romantic

partner (1 = *low inclusion of self*; 7 = *high inclusion of self*). Previous research has found a moderately high correlation between the IOS and romantic relationship satisfaction (Aron et al., 2013). These two measures were correlated in our sample ( $r = .64, p < .001$ ) and were standardized and summed to create our variable of romantic satisfaction and self-identity support.

**Life satisfaction (LS).** We used the five-item *Satisfaction with Life Scale* (SWLS; Diener, Emmons, Larsen, & Griffin, 1985). Sample items include “*I am satisfied with life*” and “*The conditions of my life are excellent*”. Each item was rated on a 7-point scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). Cronbach’s alpha for this scale was .89.

**Results**

**Preliminary Analyses**

Prior to our analyses of interest, study variables were examined for deviation from normality. All variables were found to be normal. To detect sample and gender differences, a MANOVA was performed to check for sample and gender differences and for differences on study variables. Results are presented in Table 1. The main effect for gender was significant. Univariate test shows women rated FSSIS more highly than men,  $F(1, 444) = 12.46, p < .001$ . This result was qualified by a significant relationship status by gender interaction,  $F(4, 222) = 6.74, p < .001$ . Inspection of univariate ANOVAs revealed that there were no gender differences for any of the study variables in romantically involved students. Single female college students reported higher anxious attachment to friends, higher FSSIS, and greater LS. Given these gender differences, we conducted a multivariate analysis with gender as a covariate (MANCOVA). Romantically involved students reported greater LS,  $F(1, 451) = 11.63, p < .001$ . Single students reported higher scores on FSSIS,  $F(1, 451) = 4.13, p = .033$ , supporting H2A.

Table 1  
*Study Variables in Samples of Single and Romantically Involved College Students*

	Romantically involved				Single			
	Male		Female		Male		Female	
	(n = 23)		(n = 209)		(n = 37)		(n = 190)	
	M	SD	M	SD	M	SD	M	SD
Avoidant attachment to friends	2.08	0.84	2.17	0.64	2.25	0.52	2.16	0.65
Anxious attachment to friends	2.29	0.73	2.41	0.78	2.24	0.61	2.47	0.74
FSSIS	5.39	0.87	5.63	0.73	5.26	0.68	5.79	0.71
Relationship satisfaction	4.04	0.94	4.15	0.83	-	-	-	-
IOS (self-expansion)	4.35	1.60	4.48	1.50	-	-	-	-
Life satisfaction	5.16	1.00	5.38	1.10	4.52	1.40	5.00	1.30

Note. FSSIS: Friendship satisfaction and self-identity support.

## DYADIC-WITHDRAWAL HYPOTHESIS

Table 2

*Study Variables in Samples of Single and Romantically Involved College Students*

	Romantically involved ( <i>n</i> = 232)		Single ( <i>n</i> = 227)		<i>F</i> (1, 450)
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
Avoidance attachment to friends	2.16	0.66	2.16	0.62	0.00
Anxious attachment to friends	2.41	0.77	2.45	0.73	3.15
FSSIS	5.59	0.75	5.73	0.71	4.59*
Life satisfaction	5.34	1.13	4.96	1.29	10.93***

*Note.* FSSIS: Friendship satisfaction and self-identity support; Omnibus  $F(4, 441) = 5.82, p < .001$ ; \*  $p < .05$ . \*\*\*  $p < .001$ .

There were no relationship status differences on anxious attachment to friends,  $F(1, 452) = .38, p = .537$ , or avoidant attachment to friends,  $F(1, 452) = .01, p = .920$ . In support of DWH, single college students reported more FSSIS than romantically involved students. However, romantically involved students reported having a higher LS than single students. Results are presented in Table 2.

### Correlation Results

Zero-order correlations were computed among our studied variables in both student samples (see Table 3 and 4). In romantically involved and single students, anxious and avoidant attachment to friends were positively correlated to each other and they were both negatively related to LS. FSSIS was positively correlated with LS in both samples. For romantically involved students, RSSIS was positively associated with LS.

### Dyadic-Withdrawal Hypothesis

The DWH posits that friendships become less central or less important when young adults become romantically involved. Accordingly, we expected that LS would be negatively related to anxious attachment and avoidant attachment to friends and positively related to FSSIS for all students (H1); but that the associations between attachment style and LS, as well as between FSSIS and LS would be stronger in single college students than for romantically involved students (H2B).

To test these hypotheses, we conducted a moderated hierarchical regression analysis. LS was regressed onto relationship status (single vs. romantically involved) at step one, anxious attachment to friends, avoidant attachment to friends, and FSSIS at step two. Step three consisted of three interaction terms to test whether sample moderated the step two

Table 3

*Correlations Among Study Variables for Single Students*

	1	2	3	4
1. Avoidant attachment to friends	-			
2. Anxious attachment to friends	.48***	-		
3. FSSIS	-.58***	-.18***	-	
4. LS	-.57***	-.31***	.45***	-

*Note.* FSSIS: Friendship satisfaction and self-identify support; LS: Life satisfaction; \*\*\*  $p < .001$ .

Table 4

*Correlations Among Study Variables for Romantically Involved Students*

	1	2	3	4	5
1. Avoidant attachment to friends	-				
2. Anxious attachment to friends	.45***	-			
3. FSSIS	-.58***	-.17*	-		
4. RSSIS	-.19**	-.13*	.08	-	
5. LS	-.37***	-.24***	.26***	.30***	-

*Note.* FSSIS: Friendship satisfaction and self-identify support; RSSIS: Relationship satisfaction and self-identity support; LS: Life satisfaction; \*  $p < .05$ . \*\*  $p < .01$ . \*\*\*  $p < .001$ .

Table 5  
Moderated Hierarchical Regression Results for Life Satisfaction

	<i>B</i>	<i>SE</i>	$\beta$	<i>t</i>	<i>df</i>
Step 1 <sup>a</sup>					
Constant	4.56	0.18		25.08	445
Relationship status	0.39	0.12	.16***	3.43	445
Step 2 <sup>b</sup>					
Constant	4.51	0.16		27.74	442
Relationship status	0.42	0.10	.17***	4.11	442
Avoidant attachment to friends	-0.33	0.07	-.27***	-4.74	442
Anxious attachment to friends	-0.15	0.06	-.12**	-2.55	442
FSSIS	0.22	0.06	.18***	3.44	442
Step 3 <sup>c</sup>					
Constant	4.48	0.16		27.76	439
Relationship status	0.43	0.10	.18***	4.23	439
Avoidant attachment to friends	-0.34	0.07	-.27***	-4.82	439
Anxious attachment to friends	-0.15	0.06	-.12**	-2.54	439
FSSIS	0.23	0.06	.18***	3.59	439
Avoidant x relationship status	0.04	0.07	.03	0.51	439
Anxious x relationship status	0.03	0.06	.02	0.45	439
FSSIS x relationship status	-0.13	0.06	-.11*	-2.08	439

Note. <sup>a</sup> $F(1, 446) = 11.80, p < .001, R^2_{adj} = .03, \Delta R^2 = .03, t = 11.80, p < .001$ ; <sup>b</sup> $F(3, 443) = 34.33, p < .001, R^2_{adj} = .24, \Delta R^2 = .21, t = 40.79, p < .001$ ; <sup>c</sup> $F(7, 440) = 21.40, p < .000, \Delta R^2 = .02, t = 3.42, p < .05; p < .05. **p < .01. ***p < .001.$

variables (relationship status x avoidant attachment to friends, relationship status x anxious attachment to friends, and relationship status x FSSIS). The overall model was significant,  $F(4, 440) = 21.40, p < .001, R^2_{adj} = .25$  (see Table 5 for details). LS was higher for romantically involved students,  $\beta = .18, p < .001$ . Avoidant and anxious attachment to friends were both negatively associated with life satisfaction ( $\beta = -.27, p < .001$  and  $\beta = -.13, p < .01$ , respectively), and neither variable was moderated by relationship status. There was a main effect for FSSIS ( $\beta = .18, p = .038$ ), but the interaction term was also significant, indicating that the relationship between FSSIS and LS was moderated by relationship status ( $\beta = -.11, p < .05$ ). This interaction is depicted in Figure 1: LS was highest for the romantically involved students who reported higher levels of FSSIS. This interaction suggests that the ability of FSSIS to predict LS is stronger in single students. Taken together, these results support H1 and partially support H2B.

Our last predictions ventured that for romantically involved students, RSSIS would be related to LS (H3) and would be more strongly related to LS than FSSIS (H4). We regressed LS onto avoidant attachment to friends, anxious attachment to friends, and FSSIS at step one. At step two we regressed RSSIS. The overall model was significant,  $F(5, 226) = 12.05, p < .001,$

$R^2_{adj} = .19$ . As in our previous regression results, avoidant attachment to friends was negatively related to LS ( $\beta = -.27, p < .000$ ). RSSIS was positively related to LS ( $\beta = .24, p = .078$ ), and the relationship between FSSIS and LS was positive but not significant ( $\beta = .10$ ). We tested H4 by statistically comparing the beta estimates for FSSIS and RSSIS. We computed 95% confidence intervals and inspection revealed that both coefficients ( $\beta = .10$  and  $\beta = .24$ ) had overlapping confidence intervals and were not significantly different. Our results suggest that for romantically involved students, RSSIS, secure attachment to friends, and FSSIS may all be important for life satisfaction; but RSSIS is not more important for life satisfaction than FSSIS. Results are presented in Table 6.

### Discussion

Our study results extend prior research on the dyadic-withdrawal hypothesis (DWH) by examining two psychosocial benefits of friendship in samples of single and romantically involved college students. We ventured three hypotheses regarding the relationships between the psychosocial benefits of friendship and life satisfaction. H1: Anxious and avoidant attachment to friends, in general, would have a negative relation to life satisfaction and that FSSIS would have a

DYADIC-WITHDRAWAL HYPOTHESIS

Table 6

Hierarchical Regression Results for Romantically Involved Students ( $n = 229$ )

	<i>B</i>	<i>SE</i>	$\beta$	[95% CI]	<i>t</i>	<i>df</i>
Step 1 <sup>a</sup>						
Constant	5.94	0.83		-	7.13	224
Avoidant attachment to friends	-0.46	0.14	-.27*	[-0.54, -0.00]	-3.14	224
Anxious Attachment to friends	-0.15	0.10	-.10	[-0.30, 0.10]	-1.51	224
FSSIS	0.14	0.12	.09	[-0.15, 0.33]	1.27	224
Step 2 <sup>b</sup>						
Constant	4.62	0.88		-	5.27	223
Avoidant attachment to friends	-0.39	0.14	-.23*	[-0.50, 0.04]	-2.76	223
Anxious attachment to friends	-0.13	0.10	-.09	[-0.29, 0.11]	-1.35	223
FSSIS	0.15	0.11	.10	[-0.12, 0.32]	1.33	223
RSSIS	0.25	0.06	.24**	[0.12, 0.36]	3.88	223

Note. FSSIS: Friendship satisfaction and self-identity support; RSSIS: Relationship satisfaction and self-identity support; <sup>a</sup> $F(3, 225) = 13.10, p < .001, R^2 = .15, R^2_{adj} = .14, \Delta R^2 = .15, t = 13.10, p < .001$ ; <sup>b</sup> $F(4, 224) = 14.21, p < .001, R^2 = .20, R^2_{adj} = .19, \Delta R^2 = .05, t = 15.06, p < .001$ ; \*  $p < .01$ . \*\*  $p < .001$ .

positive relation to life satisfaction. H2A: Single students would report higher levels of FSSIS than romantically involved college students. H2B: Anxious and avoidant attachment to friends and FSSIS would be more strongly correlated with life satisfaction for single college students than for romantically involved college students. We also created two hypotheses regarding how these resources may be less important for romantically involved students. H3: RSSIS would be positively related to life satisfaction for romantically involved college students. H4: RSSIS would be more strongly correlated with life satisfaction than FSSIS or anxious and avoidant attachment in romantically involved students.

We found that secure attachment to friends and FSSIS is associated with life satisfaction for both

single and romantically involved students, supporting H1. Although single students reported, on average, having higher FSSIS, supporting H2A, we found that life satisfaction was highest for romantically involved students who reported high levels of FSSIS. H3 was supported, RSSIS was positively related to life satisfaction. Interestingly however, H4 was not supported; RSSIS did not predict life satisfaction more than FSSIS for those in romantic relationships. Thus, we found evidence to suggest the primacy of the friendship relationships in determining life satisfaction for both single and romantically involved students.

Our results underscore the importance of friendship attachment and identity support during emerging adulthood (Arnett, 2000) and offers additional support for these variables in the context of DWH research.

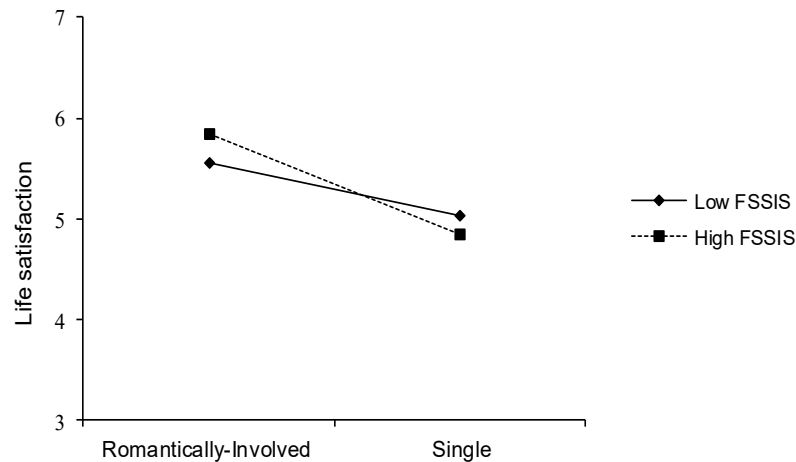


Figure 1. Life Satisfaction, FSSIS and Relationship status interaction.

Previous research on the DWH has examined the impact of romantic relationships largely using structural aspects of friendship (e.g., friendship network size, time spent with friends; Johnson & Leslie, 1982). By examining psychosocial benefits of friendships for self-identity support, our results suggest that this form of psychosocial support for self-identity and its importance in life satisfaction may not be adversely affected by involvement in a romantic relationship.

Our results also replicate earlier research on attachment style with our findings that an important positive benefit of friendships is the perception of being valued by them and the belief that one's friends are trustworthy (e.g., secure attachment to friends) and these perceptions are positively associated with life satisfaction (Daley & Hammen, 2002; LaGuardia et al., 2000). Our results add to the literature on attachment style and well-being by examining the relationship between attachment style and life satisfaction in both single and romantically involved young adults as part of examining the usefulness of the DWH in understanding if romantic involvement impacts the importance of friendship on well-being. Our results suggest that friends remain important to well-being, even when romantically involved (LaGuardia et al., 2000; Rawlins, 1994, 2000). Although longitudinal researches have documented that friendship networks become smaller over the life course and may change when people begin to date, cohabitate, or marry (Hartup & Stevens, 1997; Kalmijn, 2003; Milardo, 1982; Milardo, Johnson, & Huston, 1983; Stadfeld & Pentland, 2015), studies successively find that across the lifespan, friendship is important for happiness and well-being (Argyle, 2013; Demir & Weitekamp, 2007; Diener & Seligman, 2002; Lucas & Dyrenforth, 2006). Accordingly, an important contribution of our study is that when considering how friendship dynamics may change in the context of a romantic relationship, researchers might benefit from considering friendship factors that are less dependent on network size or time investment. Furthermore, an investigation of the benefits of remaining psychologically attached to one's friends should also be explored. During emerging adulthood, romantic relationships may end, and the perception of secure attachment to friends is a significant resource for life satisfaction (Moller, Fouladi, McCarthy, & Hatch, 2003).

### Limitations

The goal of this research was to examine how friendships play a meaningful role in college students' lives (Berger & Kellner, 1970). Our research project depended on collecting information from college students via a psychology undergraduate subject pool.

A notable criticism is that our sample is not representative of college students and included relatively few men. This limitation is likely to impact our understanding about the importance of friendship self-identity support. For example, female participants, regardless of relationship status, reported higher levels of friendship self-identity support, replicating previous research by Bank and Hansford (2000). Future studies would benefit from samples with a more balanced gender representation, in addition to assessing same-sex romantic relationships.

Another limitation to our study is that three of the five items used to measure friendship support for self-identity were created for the present study and not validated. Although the items that we used have good face validity regarding identity support and satisfaction, future research would benefit from using validated measures of friendship identity support. In addition to using other measures of identity support, improvements to future research endeavors could include other types of psychosocial benefits of friendship, such as different types of social support that friends and romantic others might provide.

Furthermore, one other limitation of our study is that we did not gather any information about other important variables that might affect DWH, such as length and quality of romantic relationships. These variables might provide important clues as to when the DWH may be more or less applicable. For example, friends may remain more psychologically important in the presence of a casual romantic relationship compared to a more serious, long-term relationship. Another unexplored issue in our study is the explanation as to why college students were not dating. Given our unexpected finding that romantically involved students reported higher life satisfaction, it may be important to distinguish between single students who are not dating but wish they were, compared to single students who choose not to become romantically involved.

An additional criticism of our study is that we relied on a self-report survey that was administered early in the semester, primarily with first-year college students. Perceptions may change over the course of time. Other types of methodological approaches, such as a longitudinal study, may help us better understand the dynamics of how the impact of friendships on well-being may change over time once involved in a romantic relationship. For example, a very recent study examined how attachment preferences in young adults change over time (Umemura, Lacinova, Macek, & Kunnen, 2017). These authors studied a sample of Czech adults over two summers and found that romantic relationships impact attachment preferences for friends, but not for other important attachment



figures such as parents or family. We should also inquire about how friends and romantic partners interact online and face-to-face. This kind of information may be especially important in the context of rapidly changing technologies that allow college students to stay in touch with their friends over time, regardless of distance, as well as vicariously engage in social events and celebrate important social occasions. Thus, the impact of romantic involvement may have less of an effect on structural aspects of friendship in today's college students (Rosenfeld & Thomas, 2012).

## Conclusion

Our study results provide preliminary support for the idea that the importance of friendships for life satisfaction may not be reduced in the context of romantic involvement. We found that secure attachment to friends and FSSIS was related to life satisfaction, regardless of whether they were romantically involved or not. Additionally, RSSIS was related to life satisfaction for romantically involved students; however, this effect did not supersede the importance of FSSIS to life satisfaction for those students. In the context of the DWH, individuals in romantic relationships invest more energy in their romantic partner, rather than their friends. Therefore, although inconsistent with the tendencies described by DWH, our results agree with a large literature showing that engaging and cultivating friendships, perhaps more so than romantic partnerships, is fundamentally important to life satisfaction (Baumeister & Leary, 1995), especially in college-aged adults (Brooks, 2007). We hope our study results might encourage others to think more broadly about the meaning of friendship in the lives of emerging adults, regardless of their relationship status.

## References

- Ainsworth, M.D., Blehar, M.C., Waters, E., & Wall, S. (1978). *Patterns of attachment*. Hillsdale, NJ: Erlbaum.
- Anthony, A.K., & McCabe, J. (2015). Friendship talk as identity work: Defining the self through friend relationships. *Symbolic Interaction*, 38, 64-82.
- Argyle, M. (2013). *The psychology of happiness*. London, United Kingdom: Routledge.
- Arnett, J. J. (2000). Emerging adulthood: A theory of development from the late teens through the twenties. *American Psychologist*, 55, 469-480.
- Aron, A., Aron, E. N., & Smollan, D. (1992). Inclusion of other in the self scale and the structure of interpersonal closeness. *Journal of Personality & Social Psychology*, 63, 596-612.
- Aron, A., Lewandowski Jr, G. W., Mashek, D., & Aron, E. N. (2013). The self-expansion model of motivation and cognition in close relationships. In J. Simpson & L. Campbell (Eds.). *The Oxford Handbook of Close Relationships* (pp. 90-115). Oxford, United-Kingdom: Oxford University Press.
- Baldwin, M. W., & Fehr, B. (1995). On the instability of attachment style ratings. *Personal Relationships*, 2, 247-261.
- Bank, B. J., & Hansford, S. L. (2000). Gender and friendship: Why are men's best same-sex friendships less intimate and supportive? *Personal Relationships*, 7, 63-78.
- Bartholomew, K. (1993). From childhood to adult relationships: Attachment theory and research. In S. Duck (Ed.), *Learning about Relationships* (pp. 30-62). London, United Kingdom: Sage.
- Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, 117, 497-529.
- Berger, P., & Kellner, H. (1970). Marriage and the construction of reality. In H. P. Dreitzel (Ed.), *Recent Sociology No. 2: Patterns of Communicative Behavior* (pp. 50-72). New York, NY: Macmillan.
- Bowlby, J. (1969). *Attachment and loss: Volume 1, Attachment*. Harmondsworth, United Kingdom: Penguin.
- Brooks, R. (2007). Friends, peers and higher education. *British Journal of Sociology of Education*, 28, 693-707.
- Carbery, J., & Buhrmester, D. (1998). Friendship and need fulfillment during three phases of young adulthood. *Journal of Social and Personal Relationships*, 15, 393-409.
- Caron, A., Lafontaine, M., Bureau, J., Levesque, C., & Johnson, S. M. (2012). 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 Behavioral Science/Revue canadienne des sciences du comportement*, 44, 245-256.
- Chickering, A. W., & Reisser, L. (1993). *Education and identity* (2nd ed.). San Francisco, CA: Jossey-Bass.
- Clark, M. S., & Graham, S. M. (2005). Do relationship researchers neglect singles? Can we do better? *Psychological Inquiry*, 16, 131-136.
- Collins, N. L., & Feeney, B. C. (2000). A safe haven: An attachment theory perspective on support seeking and caregiving in adult romantic relationships. *Journal of Personality and Social Psychology*, 78, 1053-1073.
- Collins, N. L., & Read, S. J. (1990). Adult attachment, working models, and relationship quality in dating couples. *Journal of Personality and Social Psychology*, 58, 644-663.
- Collins, W. A., & van Dulmen, M. (2006). The course

- of true love(s): Origins and pathways in the development of romantic relationships. In A. Crouter & A. Booth (Eds.), *Romance and sex in emerging adulthood: Risks and opportunities* (pp. 63-86). Mahwah, NJ: Lawrence Erlbaum Associates.
- Cozzarelli, C., Hoekstra, S. J., & Bylsma, W. H. (2000). General versus specific mental models of attachment: Are they associated with different outcomes? *Personality and Social Psychology Bulletin*, *26*, 605-618.
- Daley, S. E., & Hammen, C. (2002). Depressive symptoms and close relationships during the transition to adulthood: Perspectives from dysphoric women, their best friends, and their romantic partners. *Journal of Consulting and Clinical Psychology*, *70*, 129-141.
- Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior*. New York, NY: Plenum.
- Demir, M. (2010). Close relationships and happiness among emerging adults. *Journal of Happiness Studies*, *11*, 293-313.
- Demir, M., & Weitekamp, L. A. (2007). I am so happy 'cause today I found my friend: Friendship and personality as predictors of happiness. *Journal of Happiness Studies*, *8*, 181-211.
- DePaulo, B. M., & Morris, W. L. (2005). Singles in society and science. *Psychological Inquiry*, *16*, 57-83.
- Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The satisfaction with life scale. *Journal of Personality Assessment*, *49*, 71-75.
- 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., Wirtz, D., Tov, W., Kim-Prieto, C., Choi, D., Oishi, S., & Biswas-Diener, R. (2009). New measures of well-being: Flourishing and positive and negative feelings. *Social Indicators Research*, *39*, 247-266.
- Diener, E., & Seligman, M. E. (2002). Very happy people. *Psychological Science*, *13*, 81-84.
- Doherty, N.A., & Feeney, J.A. (2004). The composition of attachment networks throughout the adult years. *Personal Relationships*, *11*, 469-488.
- Fischer, J. L., Sollie, D. L., Sorell, G. T., & Green, S. K. (1989). Marital status and career stage influences on social networks of young adults. *Journal of Marriage and the Family*, *51*, 512-534.
- Furman, W., Simon, V. A., Shaffer, L., & Bouchey, H. A. (2002). Adolescents' working models and styles for relationships with parents, friends, and romantic partners. *Child Development*, *73*, 241-255.
- Gächter, S., Starmer, C., & Tufano, F. (2015). Measuring the closeness of relationships: A comprehensive evaluation of the 'inclusion of the other in the self' scale. *PLoS one*, *10*, e0129478.
- Gustavson, K., Røysamb, E., Borren, I., Torvik, F., & Karevold, E. (2016). Life satisfaction in close relationships: Findings from a longitudinal study. *Journal of Happiness Studies*, *17*, 1293-1311.
- Hartup, W.W., & Stevens, N. (1997). Friendship and adaptation in the life course. *Psychological Bulletin*, *121*, 355-370.
- Hazan, C., & Shaver, P. (1987). Romantic love conceptualized as an attachment process. *Journal of Personality and Social Psychology*, *52*, 511-524.
- Hendrick, S. S. (1988). A generic measure of relationship satisfaction. *Journal of Marriage and the Family*, *50*, 93-98.
- Johnson, M. P., & Leslie, L. (1982). Couple involvement and network structure: A test of the dyadic withdrawal hypothesis. *Social Psychology Quarterly*, *45*, 34-43.
- Kalmijn, M. (2003). Shared friendship networks and the life course: An analysis of survey data on married and cohabiting couples. *Social Networks*, *25*, 231-249.
- Kobak, R. (1994). Adult attachment: A personality or relationship construct? *Psychological Inquiry*, *5*, 42-44.
- La Guardia, J. G., Ryan, R. M., Couchman, C. E., & Deci, E. L. (2000). Within-person variation in security of attachment: A self-determination theory perspective on attachment, need fulfillment, and well-being. *Journal of Personality and Social Psychology*, *79*, 367-384.
- Levitt, M. J., Weber, R. A., & Clark, M. C. (1986). Social network relationships as sources of maternal support and well-being. *Developmental Psychology*, *22*, 310-316.
- Lewis, M. (1994). Does attachment imply a relationship or multiple relationships? *Psychological Inquiry*, *5*, 47-51.
- Lipka, R.P., & Brinthaup, T. M. (1992). *Self-perspectives across the life span*. New York, NY: SUNY Press.
- Lucas, R. E., & Dyrenforth, P. (2006). Does the existence of social relationships matter for subjective well-being? In K. D. Vohs & E. J. Finkel (Eds.), *Self and relationships: Connecting intrapersonal and interpersonal processes* (pp. 254-273). New York, NY: Guilford Press.
- Mikulincer, M. & Florian, V. (1998). The relationship between adult attachment styles and emotional and cognitive reactions to stressful events. In J.A. Simpson & W.S. Rholes (Eds.), *Attachment Theory and close relationships* (pp. 143-165). New York, NY: Guilford Press.
- Milardo, R. M. (1982). Friendship networks in developing relationships: Converging and diverging social environments. *Social Psychology*

- Quarterly*, 45, 162-172.
- Milardo, R.M., Johnson, M.P., & Huston, T.L. (1983). Developing close relationships: Changing patterns of interaction between pair members and social networks. *Journal of Personality and Social Psychology*, 44, 964-976.
- Moller, N.P., Fouladi, R.T., McCarthy, C.J., & Hatch, K.D. (2003). Relationship of attachment and social support to college students' adjustment following a relationship breakup. *Journal of Counseling and Adjustment*, 81, 354-369.
- Rawlins, W. K. (1994). Being there and growing apart: Sustaining friendship during adulthood. In D. J. Canary & L. Stafford (Eds.), *Communication and relational maintenance* (pp. 273-292). San Diego, CA: Praeger Publishers.
- Rawlins, W. K. (2000). Placing friendships in context. *Contemporary Psychology*, 45, 1-12.
- Rosenfeld, M. J., & Thomas, R. J. (2012). Searching for a mate: The rise of the internet as a social intermediary. *American Sociological Review*, 77, 523-547.
- Ross, L. R., & Spinner, B. (2001). General and specific attachment representations in adulthood: Is there a relationship? *Journal of Social and Personal Relationships*, 18, 747-766.
- Rubin, K. H., Bukowski, W., & Parker, J. G. (2007). Peer interactions, relationships, and groups. In W. Damon (Series Ed.), & N. Eisenberg (Vol. Ed.), *Handbook of child psychology: Vol. 3. Social, emotional, and personality development* (7th ed., pp. 571-645). New York, NY: Wiley.
- Schneider, B. H., Atkinson, L., & Tardif, C. (2001). Child-parent attachment and children's peer relations: A quantitative review. *Developmental Psychology*, 37, 86-100.
- Shaver, P. R., Belsky, J., & Brennan, K. A. (2000). The adult attachment interview and self-reports of romantic attachment: Associations across domains and methods. *Personal Relationships*, 7, 25-43.
- Simpson, J.A. (1990). Influence of attachment styles on romantic relationships. *Journal of Personality and Social Psychology*, 59, 971-980.
- Stadtfeld, C., & Pentland, A. (2015). Partnership ties shape friendship networks: A dynamic social network study. *Social Forces*, 94, 453-477.
- Trinke, S. J., & Bartholomew, K. (1997). Hierarchies of attachment relationships in young adulthood. *Journal of Social and Personal Relationships*, 14, 603-625.
- Umemura, T., Lacinová, L., Macek, P., & Kunnen, E.S. (2017). Longitudinal changes in emerging adults' attachment preferences for their mother, father, friends, and romantic partner. *International Journal of Behavioral Development*, 41, 136-142.
- Weisz, C., & Wood, L. F. (2005). Social identity support and friendship outcomes: A longitudinal study predicting who will be friends and best friends 4 years later. *Journal of Social and Personal Relationships*, 22, 416-432.

---

Received May 5, 2017

Revision received July 28, 2017

Accepted September 7, 2017 ■