

Articles

Attached at the Lips: The Influence of Romantic Kissing Motives and Romantic Attachment Styles on Relationship Satisfaction

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Abstract

Although romantic kissing is an important part of relationship functioning, little research has focused on motives for romantic kissing and how they may relate to other aspects of romantic relationships. To understand how romantic kissing impacts romantic relationship functioning, the current study assessed the relationship between romantic attachment, romantic kissing motives, and relationship satisfaction. Overall, it was hypothesized that (a) those reporting more sexual/explicit kissing motives and fewer goal attainment/insecurity motives would report higher relationship satisfaction, (b) those reporting a more secure attachment style would report higher relationship satisfaction, and (c) the relationship between romantic kissing motives and relationship satisfaction would vary according to one's romantic attachment styles. Results from a hierarchical linear regression with 286 adults, all of whom were currently in romantic relationships, revealed that sexual/relational ($\beta = 0.25$) and goal attainment/insecurity kissing motives ($\beta = -0.35$) predicted relationship satisfaction. However, the impact of kissing motives on relationship satisfaction varied according to one's romantic attachment. Specifically, the influence of sexual/relational motives was only significant for avoidantly attached individuals, whereas the influence of goal attainment/insecurity motives was significant for avoidantly and anxiously attachment individuals. Overall, this suggests that sexual/explicit romantic kissing motives serve to enhance the relationships of insecurely attached individuals, but not securely attached individuals. Furthermore, goal attainment/insecure motives had a negative effect on the relationship satisfaction of insecurely attached individuals, but not securely attached individuals, but not securely attached individuals. This study has important implications for both practitioners working with romantic couples and researchers studying romantic relationships.

Keywords: kissing motives, attachment styles, relationship satisfaction, romantic relationships, romantic kissing

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The average U.S. adult romantically kisses someone around 30 times a week (Thompson, Anisimowicz, & Kulibert, 2017). This alone demonstrates that romantic kissing, defined as "lip-to-lip contact that may or may not be prolonged between two individuals in a sexual, intimate setting" (Thompson et al., 2017, p. 1), occurs frequently within Western society. Romantic kissing is also an important component of healthy romantic relationships, with couples who kiss more frequently reporting higher relationship satisfaction than couples who kiss less frequently (Welsh, Haugen, Widman, Darling, & Grello, 2005). Despite research suggesting that romantic kissing can improve relationships and impact relationship satisfaction (Floyd, Boren, Hannawa, Hesse, McEwan, & Veksler, 2009; Welsh et al., 2005), little research has focused on (a) motives for romantic kissing or (b) factors that influence these motives.

Motives for Romantic Kissing

Most studies investigating motives for romantic kissing have done so by focusing on the universal, biological drive for sex and intimacy, often by adopting a physiological and/or evolutionary perspective (Hughes & Kruger, 2011; Hughes, Harrison, & Gallup, 2007; Walter, 2008; Wlodarski & Dunbar, 2013; 2014). In particular, proponents of evolutionary theory argue that romantic kissing allows individuals to evaluate potential mates, thus playing a significant role in mate selection (Walter, 2008; Wlodarski & Dunbar, 2013; 2014). In sum, it is argued that the quality of a romantic kiss may provide necessary information at the subconscious level by signaling an individual to the genetic fitness of a potential mate.

Although the evolutionary explanation for romantic kissing motives is informative and useful, one concern with this framework is that additional motives for romantic kissing (beyond those related to mate selection) are overlooked. In fact, such theories often downplay the role of the conscious, subjective reasons for why people engage in romantic kissing. Thus, to address these concerns, the YKiss? Scale (Thompson et al., 2017) was developed to distinguish between these types of motives and provide psychologists with a valid and reliable measurement of these motives. The YKiss? Scale was developed by adapting the YSex? Scale (Meston & Buss, 2007) and through the use of focus groups to create a comprehensive list of potential motives that adults in the U.S. report for romantic kissing. Through a series of studies, the psychometric properties of the scale were established (i.e., validity and reliability), thereby creating a useful tool for researchers to use when measuring motives for romantic kissing, investigating what variables predict these motives for romantic kissing, and examining how variations in motives lead to different sexual/romantic outcomes.

According to the research program in which the YKiss? Scale was developed, two broad categories related to adults' motives for romantic kissing emerged: sexual/relational motives and goal attainment/insecurity motives. The sexual/relational subscale was comprised of items related to becoming aroused, seeking love and affection, and acting on interpersonal attraction. Some sample sexual/relational items include "I wanted to show my affection" and "I wanted to say 'I missed you'." The goal attainment/insecurity reflected motives related to using kissing to avoid undesirable outcomes, boosting one's self-esteem, and mate-guarding. Sample goal/attainment/insecurity items included "I wanted to feel better about myself" and "I felt obligated."

These two categories of motives for romantic kissing fit with the approach-avoidance framework, in which motivational processes are classified into two distinct systems: approach and avoidance (Carver, Sutton, & Scheier, 2000; Elliot & Covington, 2001). In fact, the approach-avoidance framework has also been applied to assessment of motives for sexual behavior (Cooper, Talley, Sheldon, Levitt, & Barber, 2008; Impett, Peplau, & Gable, 2005) revealing that people's reasons for engaging in sexual behavior can be classified using these systems as well. In fact, many of the approach ("to express love for a partner," "to promote intimacy in my relationship") and avoidance motives (reported for sexual behavior "to prevent my partner from getting angry at me," "to cope with negative emotions") are consistent with those from the sexual/relational and goal attainment/insecurity motives from the YKiss? Scale (Downey, Freitas, Michaelis, & Khouri, 1998; Impett et al., 2005).

Romantic Kissing Motives and Sexual Motives

Despite the fact that no study has attempted to investigate how motives for romantic kissing influence relationship satisfaction, one study that did assess the relationship between romantic kissing frequency and relationship satisfaction determined that frequency of romantic kissing, along with the frequency of other sexual behav-



iors, predicted relationship satisfaction and commitment levels (Welsh et al., 2005). Furthermore, the association between motives for sexual behavior and relationship satisfaction has been researched extensively and has demonstrated that these motives affect relationship longevity, relationship satisfaction, and sexual satisfaction (Birnbaum, 2007; Impett et al., 2005; Seehuus & Rellini, 2013; Zimmer-Gembeck, See, & O'Sullivan, 2015). For example, couples endorsing approach motives for engaging in sexual behavior (e.g., to promote intimacy or closeness) report higher relationship/sexual satisfaction, higher life satisfaction, and more positive emotions than those endorsing avoidance goal motives (e.g., to avoid conflict or disappointing a partner; Impett et al., 2005; Muise, Impett, & Desmarais, 2013).

Although most of the previous research has focused on sexual behaviors and have not addressed romantic kissing specifically, research on sexual script theory and relationship development provide evidence for the link between romantic kissing and other sexual behaviors. Specifically, research examining adolescent sexual behavior has reported that one's sexual activity tends to start with romantic kissing and progress to more intimate behaviors (e.g., oral sex, vaginal intercourse), demonstrating an important link between romantic kissing and other sexual behaviors (O'Sullivan, Cheng, Harris, & Brooks-Gunn, 2007). Research has also demonstrated a correlation between the frequency of romantic kissing and other sexual behaviors (e.g., sexual intercourse, intimate touching, oral sex) in romantic relationships (Welsh et al., 2005). These results demonstrate that sexual motives hold important implications for both members of a relationship dyad and that motivations for engaging in other romantic/sexual behaviors (e.g., romantic kissing) may influence relationship satisfaction as well.

Attachment Theory and Romantic Relationships

Although the link between sexual motives and relationship satisfaction is well-established (Birnbaum, 2007; Impett et al., 2005; Muise et al., 2013; Seehuus & Rellini, 2013), research indicates that a variety of variables influence this relationship. Perhaps one of the most influential variables affecting this relationship is romantic attachment style (Butzer & Campbell, 2008). Proponents of attachment theory argue that romantic attachment is initially influenced by one's emotional attachment with a caregiver (Bowlby, 1973; 1982). When a child grows up in unstable environments, surrounded by caregivers with inconsistent responses to his/her needs and wants, the child develops insecure attachment styles (i.e., anxious or avoidant). In contrast, when a child grows up in stable environments with the ability to consistently predict how a caregiver will respond to his/her needs, that child develops a secure attachment style. In addition to the impact of attachment styles in childhood, research indicates that relationships formed between a child and their primary caregiver shape all future close relationships, including romantic relationships (Hazan & Shaver, 1987).

Research on adults' romantic attachment reveals that there are three distinct attachment styles: avoidant, anxious, and secure (Hazan & Shaver, 1994). An avoidant romantic attachment style is characterized by discomfort with close interaction or relationships, and an individual scoring high on avoidant attachment measures would report discomfort with emotional closeness (Berant, Mikulincer, & Florian, 2001; Davis, Shaver, & Vernon, 2003; Snapp, Lento, Ryu, & Rosen, 2014). An anxious romantic attachment style is characterized by an individual's doubt regarding whether or not others understand the love the individual has for them. When individuals score high on anxious attachment measures, they will often demonstrate extreme closeness in their relationships and a need to please their partner out of fear of abandonment (Collins & Read, 1990; Davis et al., 2003; Snapp et al., 2014). Finally, secure romantic attachment is characterized by comfort and ease related to commitment in romantic relationships. These individuals score low on measures of both anxious and avoidant attachment and



demonstrate a strong sense of confidence in their intimate relationships (Davis et al., 2003; Snapp et al., 2014; Weinfield, Sroufe, Egeland, & Carlson, 1999). Although three primary attachment styles have been theorized, research regarding attachment styles and their influence on romantic relationships tend to focus on the role of anxious and avoidant attachment styles.

Romantic Attachment, Sexual Motives, and Relationship Satisfaction

The research on romantic attachment and relationship satisfaction clearly demonstrates the potential negative effects of insecure attachment (i.e., anxious/avoidant) on romantic relationships. For example, insecure romantic attachment styles are associated with lower relationship quality (Hammond & Fletcher, 1991; Yahya et al., 2017), less effective-conflict management strategies (Fuller & Fincham, 1995), more negative views about romantic relationships (Collins & Read, 1990; Hammond & Fletcher, 1991), and less stability/security within relationships over time (Fuller & Fincham, 1995; Kirkpatrick & Hazan, 1994; Shi, 2003; Simpson, 1990). In fact, in their study assessing the association between romantic attachment and relationship satisfaction among married couples, Butzer and Campbell (2008) determined that adults who reported lower anxious and avoidant romantic attachment indicated having higher quality marriages than those who reported higher anxious and avoidant romantic attachment.

Not only is romantic attachment style important for understanding relationship satisfaction, but research also indicates that motives for sexual behavior vary according to one's romantic attachment style (Davis et al., 2004; Impett et al., 2005; Schachner & Shaver, 2004; Snapp et al., 2014). In particular, adults who score higher on measures of anxious attachment report engaging in sexual behavior to increase a sense of intimacy with their partner to a greater extent than do adults who score lower on measures of anxious romantic attachment (Davis et al., 2003; Schachner & Shaver, 2004; Snapp et al., 2014). Alternatively, adults who score high on measures of avoidant attachment report more nonromantic sexual motives (e.g., engaging in sexual behaviors to enhance power) and less intimate sexual motives (e.g., engaging in sexual behaviors to increase intimacy) than participants scoring low on measures of avoidant attachment (Davis et al., 2003; Schachner & Shaver, 2004; Snapp et al., 2014).

Additionally, research assessing the relationship between attachment, sexual motives, and relationship satisfaction has determined that those with a secure attachment (i.e., low scores on anxious and avoidant attachment measures) report high satisfaction in their current relationship and more approach motives for sexual behavior (Péloquin, Brassard, Delisle, & Bédard, 2013). Thus, because the motives for romantic kissing fit with the approach/avoidance framework, the relationships between attachment styles, relationship satisfaction, and motives for romantic kissing are worthy of exploration.

The Current Study

Thus, given that research has demonstrated a link between romantic attachment, motives for sexual behavior, and relationship satisfaction, it is likely that a relationship between romantic attachment, motives for romantic kissing, and relationship satisfaction also exists. This is an important area to study, given that romantic kissing is considered a gateway sexual behavior (O'Sullivan et al., 2007) and factors that predict romantic kissing motives are similar to factors that predict sexual motives (Moore, Kulibert, & Thompson, 2017). Furthermore, examining the relationship between romantic kissing motives, romantic attachment styles, and relationship satis-



faction allows us to better understand how romantic kissing may serve to enhance relationships particularly for individuals with certain attachment styles.

Consequently, the current study was designed to investigate the relationship between participants' subjective motives for romantic kissing and self-reported satisfaction in their current romantic relationship. In addition, the current study sought to examine the extent to which this relationship was influenced by personal romantic attachment style. Based on the related research reviewed above, several hypotheses were constructed. Based on previous research on sexual motives (Impett et al., 2005; Muise et al., 2013), it was predicted that those reporting more sexual/relational kissing motives and fewer goal attainment/insecurity motives would report higher relationship satisfaction (*Hypothesis 1*). Also, replicating previous findings (Butzer & Campbell, 2008), it was predicted that those scoring lower on anxious and avoidant romantic attachment would report greater relationship satisfaction than those scoring higher on these constructs (*Hypothesis 2*). Finally, because of research suggesting an association between motives for sexual behavior and romantic kissing (O'Sullivan et al., 2007; Welsh et al., 2005) as well as research demonstrating a relationship between sex motives, attachment styles, and relationship satisfaction (Péloquin et al., 2013), it was expected that the relationship between romantic kissing motives and relationship satisfaction would vary according to one's romantic attachment style (*Hypothesis 3*).

Method

Participants

For the current study, 300 U.S. adults who reported currently being in a romantic relationship were recruited via Amazon Mechanical Turk®. However, data screening of the initial 300 participants identified 14 participants that failed to complete the entire survey. Thus, the final sample was comprised of 286 adults (119 men and 167 women) ranging in age from 18 years to 70 years (M = 32.73, SD = 10.92). A majority of participants identified as being attracted exclusively to members of the opposite sex (70.22%), reported being of Caucasian/European Descent (76.10%), and indicated a relationship length ranging from one month to fifty-three years (M = 6.48 years, SD = 8.31 years). On average, participants reported receiving their first romantic kiss at the age of 15.75 years of age (SD = 3.67, range = 7 – 32 years of age). Participants also revealed romantically kissing an average of 19.18 people in their lifetime (SD = 41.05, range = 0 – 500 people), and that they enjoy kissing "very much" as evidenced by a mean of 3.95 (SD = 0.91) on a five-point scale (ranging from 1 "not at all" to 5 "extremely").

Measures

Demographic Questionnaire

Participants completed a demographic questionnaire that assessed gender, age, ethnicity, relationship status, sexual orientation, and history, frequency, and experiences with romantic kissing.

The YKiss? Scale (Thompson et al., 2017)

The scale consisted of 42 items organized into two subscales: the Sexual/Relational Motives Subscale (19 items; e.g., "It feels good," "I wanted to express my love," "I wanted to initiate other sexual behaviors") and the Goal Attainment/Insecurity Motives Subscale (23 items; e.g., "I wanted attention," "I felt obligated," "I wanted a



raise/promotion"). For each item, participants were asked to "think back to the past month and indicate how frequently each of the following led them to kiss someone" on a scale from 1 "not at all" to 5 "a great deal". All items were randomly presented to participants using Qualtrics®, an online survey software platform. Subscale and total scale scores were computed by taking the average of all items. The YKiss? has demonstrated excellent psychometric properties including convergent validity, discriminant validity, predictive validity, scale reliability, and test-retest reliability (Moore et al., 2017; Thompson et al., 2017). The internal consistency for each subscale in the current study was also excellent (Sexual/Relational Motives Subscale, $\alpha = 0.93$; Goal Attainment Motives Subscale, $\alpha = 0.95$).

Relationship Assessment Scale (RAS; Hendrick, Dicke, & Hendrick, 1998).

The scale included seven items that assessed romantic relationship satisfaction. All items on the scale were rated using a 5-point scale (ranging from 1 "low satisfaction" to 5 "high satisfaction"). Sample items include: "How well does/did your partner meet your needs?" and "How good is/was your relationship compared to most?" In the present study, the RAS demonstrated good internal consistency, with a Cronbach's alpha of 0.88.

Adult Attachment Scale (AAS; Collins & Read, 1990).

The scale is an 18-item scale designed to measure three aspects of romantic attachment style: two related to avoidant attachment (i.e., Close and Depend) and one related to anxious attachment (i.e., Anxiety). The Close Attachment Subscale (6 items) measured one's comfort when engaging in intimacy with others. Sample items on the Close Attachment Subscale include "I find it relatively easy to get close to others" and "I am somewhat uncomfortable being close to others." The Depend Attachment Subscale (6 items) measured the extent to which a person feels he/she can depend on others. Sample items on the Depend Attachment Subscale include "I find it difficult to allow myself to depend on others" and "I know that others will be there when I need them." The Anxiety Attachment Subscale (6 items) measured fear related to things such as being abandoned or unloved and includes items like "I often worry that my partner does not really love me" and "I am not sure that I can always depend on others to be there when I need them." Participants were asked to rate each item on a 5point scale from 1-"not at all characteristic of me" to 5-"very characteristic of me") in terms of the extent to which each item described their feelings about their current romantic relationship. Scale scores were created by calculating mean values for each participant for each subscale. High scores on the close attachment and depend attachment subscales indicated a more secure attachment styles, whereas higher scores on the anxiety attachment subscale indicated a more anxious attachment style. All three subscales demonstrated adequate internal consistency in the current study: Close Attachment Subscale, $\alpha = 0.76$; Depend Attachment Subscale, $\alpha = .80$; Anxiety Attachment Subscale, $\alpha = 0.78$.

Procedure

Following Institutional Review Board approval, participants were recruited through the use of advertising via Amazon's Mechanical Turk®. Participants who were interested in completing the survey followed a link to the survey hosted by Qualtrics®. The link directed participants to a consent form describing the nature of the study and eligibility for participation (i.e., over the age of 18, currently in a romantic relationships). After agreeing to the eligibility requirements and providing consent, participants were redirected to a second website where they completed the online battery of questionnaires. Upon completion of the surveys, participants were directed to a separate webpage where they were debriefed, thanked for their participation, and asked for their Mechanical



Turk® worker ID to receive compensation. The study took approximately 40 minutes to complete, with participants receiving \$1.00 USD for their participation.

Results

All data were screened and cleaned according to procedures outlined by Tabachnick and Fidell (2013). After missing data were assessed, seven participants were omitted due to missing more than 20% of their data. Because of the small amount of missing data from the remaining participants, all data were replaced using mean substitution. In addition, standardized values were used to identify the presence of outliers (with those score above or below +/- 3.00 classified as outliers). Two outliers were identified on the Goal Attainment/Insecurity Motives Subscale and were subsequently removed. Thus, after omitting those with substantial missing data and outliers, the final sample was comprised of 277 adults (116 men, 161 women).

After assessing and removing outliers, tests of skewness were computed. Although none of the subscales on the AAS were skewed, Goal Attainment/Insecurity Motives Subscale were positively skewed as evidenced by a skew statistic of 10.54 (obtained by dividing the skewness by the skew standard error) and scores on the RAS were negatively skewed as evidenced by a skew statistics of -8.76. The problematic skew for the Goal Attainment/Insecurity Motives Subscale was solved by transforming the raw values using the inverse transformation and the problematic skew for the RAS was solved by reversing scoring all of the raw values and applying the inverse transformation. As a result, the transformed variables were used in the primary analyses. However, for ease of interpretation, untransformed values were used when reporting all descriptive statistics and signs affected by reverse scored/inverse transformations were changed to reflect the accurate relationship.

Predicting Relationship Satisfaction

Results from zero-order correlations between all variables of interest demonstrate a positive relationship between relationship satisfaction and the sexual/relational kissing motives subscale, as well as the depend and the close attachment subscales. See Table 1 for the zero-order correlations between all variables included in the regression. Specifically, those who reported high relationship satisfaction also reported engaging in romantic kissing for sexual/relational motives to a greater extent than goal attainment/insecurity motives. In addition, those with greater relationship satisfaction reported feeling more comfortable both depending on and being emotional close to their romantic partner as compared to those with lower relationships satisfaction. There was also a negative relationship between relationship satisfaction and the goal attainment/insecurity kissing motives and between relationship satisfaction and the anxiety attachment subscale. Overall, individuals who reported high relationship satisfaction (as compared to those with low satisfaction) reported engaging in romantic kissing for goal attainment/insecurity motives less, and reported having less anxiety regarding the security of their romantic relationship. Finally, the goal attainment/insecurity motives subscale was negatively correlated with both the depend and the close attachment subscale, but positively correlated with the anxiety attachment subscale. Specifically, individuals who reported engaging in romantic kissing for goal attainment/insecurity motives to a greater extent experienced greater anxiety in their romantic relationships and felt less comfortable depending on/being emotional close to their romantic partner.

To establish the relationship between romantic kissing motives and self-reported romantic relationship satisfaction (as well as the moderating role of romantic attachment style), a hierarchical multiple linear regression was



Table 1

Means, Standard Deviations, and Bivariate Correlations Among Related Study Variables

Variable	1	2	3	4	5	6
1 RAS	_	0.17**	-0.30***	0.29***	0.34***	-0.45***
2 Sex/Rel		_	0.23***	0.06	0.03	0.16*
3 Goal/Insecure			_	-0.26***	-0.18**	0.47***
4 AAS Depend				_	0.71***	-0.35***
5 AAS Close					_	-0.43***
6 AAS Anxiety						_
М	4.19	3.48	1.64	3.51	3.26	2.53
SD	0.74	0.73	0.80	0.82	0.87	0.87

Note. N = 272. Sex/Rel = scores from the Sexual/Relational Motives Subscale of the Romantic Kissing Motives Measure. Goal/Insecure = scores from the Goal Attainment/Insecurity Motives Subscale of the Romantic Kissing Motives Measure. RAS = scores from the Relationship Assessment Scale. AAS Depend = scores from the Depend Attachment Subscale of the Adult Attachment Scale. AAS Close = scores from the Close Attachment Subscale of the Adult Attachment Subscale of the Adult Attachment Scale. AAS Anxiety = scores from the Anxiety Attachment Subscale of the Adult Attachment Scale.

conducted. In particular, the two romantic kissing motives subscales (i.e., Sexual/Relational, Goal Attainment/ Insecurity) were entered on Step One, the three romantic attachment subscales (i.e., Depend, Close, Anxiety) were entered on Step Two, and all two-way interaction terms were entered on Step Three. In addition, all variables were mean-centered to reduce multicollinearity. See Table 2 for all results from the hierarchical multiple linear regression.

Table 2
Summary of Hierarchical Multiple Regression

Regression Predictor	R ² Change	b	SE B	β	p
Step 1	0.15				< .001
Sexual/Relational Motives		.26	.06	0.25	< .001
Goal Attainment/Insecurity Motives		32	.05	-0.35	< .001
Step 2	0.15				< .001
Sexual/Relational Motives		.26	.05	0.25	< .001
Goal Attainment/Insecurity Motives		14	.05	-0.16	.006
Depend Attachment Subscale		.15	.06	0.18	.02
Close Attachment Subscale		01	.07	02	.84
Anxiety Attachment Subscale		29	.05	-0.34	< .001
Step 3	0.04				.01
Sexual/Relational Motives		.26	.05	0.26	< .001
Goal Attainment/Insecurity Motives		24	.08	-0.26	.003
Depend Attachment Subscale		.23	.07	0.27	.001
Close Attachment Subscale		.004	.07	.005	.95
Anxiety Attachment Subscale		22	.06	-0.25	< .001
Sexual X Depend		24	.09	-0.20	.01
Sexual X Close		.09	.09	.07	.32
Sexual X Anxiety		04	.06	04	.56
Goal X Depend		.38	.11	0.27	.001
Goal X Close		12	.10	09	.25



^{***}p < .001. **p < .01. *p < .05.

Regression Predictor	R ² Change	b	SE B	β	р
Goal X Anxiety		.21	.06	0.20	.02

Note. N = 272. Sexual = Sexual/Relational Motives. Goal = Goal Attainment/Insecurity Motives. Depend = Depend Attachment Subscale. Close = Close Attachment Subscale. Anxiety = Anxiety Attachment Subscale.

The results of the regression revealed that subjective motives for romantic kissing included on Step One accounted for a significant amount of variance in self-reported relationship satisfaction, with both the sexual/relational motives (β = 0.25) and the goal attainment/insecurity motives (β = -0.35) accounting for a significant amount of the variance in self-reported relationship satisfaction individually. Overall, those reporting more sexual/relational motives and fewer goal attainment/insecurity motives reported greater relationship satisfaction.

The results for Step Two indicated that romantic attachment accounted for a significant amount of additional variance in self-reported relationship satisfaction. Specifically, the romantic kissing motives continued to be significant contributors (sexual/relational motives β = 0.25; goal attainment/insecurity motives β = -0.16), along with scores on the depend subscale (β = 0.18) and anxiety subscales of the AAS (β = -0.34). With respect to romantic attachment, the results revealed that those who were able to depend on others (low on avoidant romantic attachment) and those who were less anxious in their relationships (low on anxious romantic attachment) reported greater relationship satisfaction.

Finally, the results of Step Three revealed that the inclusion of the interaction terms also accounted for a significant amount of additional variance in self-reported relationship satisfaction, with the same main effects continued to account for a significant amount of the variance in relationship satisfaction. In particular, sexual/relational motives (β = 0.26), goal attainment/insecurity motives (β = -0.26), scores on the depend subscale (β = 0.27) and scores on the anxiety subscales (β = -0.25) all continued to predict a unique amount of the variance in relationship satisfaction. However, three of the two-way interaction terms also accounted for a significant amount of unique variance. These significant two-way interactions included the interaction between the depend subscale and the goal attainment/insecurity motives (β = 0.27), the interaction between the depend subscale and sexual/relational motives (β = -0.20), and the interaction between the anxiety subscale and the goal attainment/insecurity (β = -0.20).

To probe the two-way interaction effects, simple slopes analyses were conducted by examining the nature of the relationship between motives for romantic kissing and relationship satisfaction when romantic attachment scores were high (+1 SD) and low (-1 SD) using Interaction!® software (Soper, 2013). The results for the first simple slopes analysis revealed that the relationship between goal attainment/insecurity motives and relationship satisfaction was significant for those scoring low on the depend subscale (β = -0.34) but not for those scoring high (β = -0.01). Overall, these results indicate that, among those who were less comfortable depending on others (high on avoidant romantic attachment), the *more* they endorsed kissing for goal attainment/insecurity reasons, the *less* satisfied they reported being in their romantic relationship (see Figure 1 for a visual representation).

Consistent with the first simple slopes analysis, the results of the second simple slopes analysis revealed that that the relationship between sexual/relational motives and relationship satisfaction was significant for those scoring low on the depend subscale (β = 0.26) but not for those scoring high (β = 0.07). These results show that among those who were uncomfortable depending on others (high on avoidant romantic attachment), the



more they endorsed kissing for sexual/relational reasons, the *more* satisfied they reported being in their romantic relationship (see Figure 2 for a visual representation).

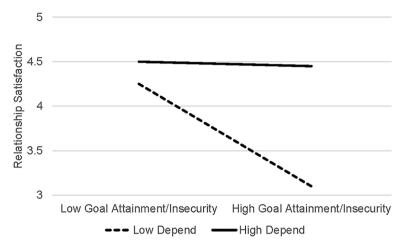


Figure 1. Graph depicting the relationship between goal attainment/insecurity motives and relationship satisfaction for those scoring high and low on the depend subscale.

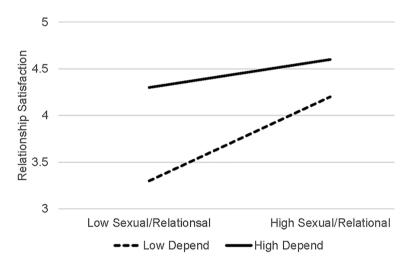


Figure 2. Graph depicting the relationship between sexual/relational motives and relationship satisfaction for those scoring high and low on the depend subscale.

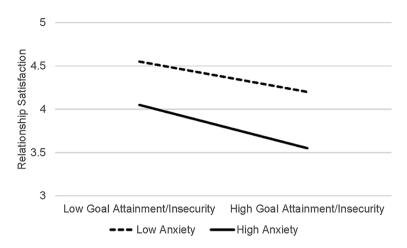


Figure 3. Graph depicting the relationship between goal attainment/insecurity motives and relationship satisfaction for those scoring high and low on the anxiety subscale.

Finally, the results of the third simple slopes analysis revealed that that the relationship between goal attainment/insecurity motives and relationship satisfaction was significant for those scoring high on the anxiety subscale (β = -0.11) but not for those scoring low on this subscale (β = -0.15). These results demonstrate that for those who experienced greater fears related to abandonment (high on anxious romantic attachment), the *more* they endorsed kissing for goal attainment/insecurity reasons, the *less* satisfied they reported being in their romantic relationship (see Figure 3 for a visual representation).

Discussion

The primary objective of the current study was to determine the impact of romantic kissing motives and romantic attachment styles on romantic relationship satisfaction. Although previous studies have examined other factors influencing relationship functioning (Hill, 1997; Péloquin et al., 2013; Seehuus & Rellini, 2013; Sprecher & Cate, 2004), the current study is novel in its focus on motives for romantic kissing. The findings demonstrate that motives for romantic kissing have both a positive and a negative impact on relationship satisfaction and emphasize the importance of studying romantic kissing. By examining this, the current study contributes to our overall understanding of how a comprehensive taxonomy of motives for romantic kissing influence the quality of one's romantic relationship.

Romantic Kissing Motives and Relationship Satisfaction

Overall, the current study highlights the importance of studying motives for romantic kissing with respect to romantic relationship functioning. In particular, the relationship between sexual/relational motives and relationship satisfaction revealed that adults who kiss more frequently for sexual/relational motives report higher relationship satisfaction than individuals who kiss for these motives less frequently. This relationship is consistent with previous research on motives for sexual behavior, revealing that sexual/relational and approach motives for sexual behavior are often positively associated with sexual satisfaction (Birnbaum, 2007; Butzer & Campbell, 2008). This is not surprising, as many of the sexual/relational motives for kissing were related to enhancing intimacy (e.g., "I wanted to feel connected to the person") and communicating affection (e.g., "I wanted to feel set



the mood"), and both intimacy and communication are associated with better relationship outcomes (Gulledge, Gulledge, & Stahmann, 2003).

Alternatively, results demonstrated a negative relationship between goal attainment/insecurity motives and relationship satisfaction, indicating that adults who kissed more often for goal attainment/insecurity motives were less satisfied in their current relationship than those who kissed less frequently for these motives. This relationship is again supported by previous research on avoidance motives for sexual behavior, indicating that some goal attainment and insecurity motives for sexual behavior are associated with decreased sexual satisfaction (Stephenson, Ahrold, & Meston, 2011). The reason for this negative relationship between goal attainment/insecurity motives and relationship satisfaction may relate to the maladaptive nature of these motives and the likelihood of negative outcomes stemming from these motives. For instance, some goal attainment/insecurity motives may be interpreted as a form of infidelity ("I wanted to make someone jealous" and "I was mad at someone so I kissed someone else"). Additionally, those who report kissing someone for these reasons may be interested in ending a dissatisfying romantic relationship and could be using romantic kissing as a means to do so.

The Moderating Role of Romantic Attachment Styles

The current study also demonstrated the impact of romantic attachment on the association between motives for romantic kissing and relationship satisfaction. Overall, the current results indicate that sexual/relational motives for romantic kissing enhance the quality of romantic relationships, but only for those who had difficulty depending on his/her partner (i.e., avoidant romantic attachment style). This is not completely surprising, given that research has demonstrated that engaging in intimate behaviors with one's romantic partner has the ability to increase relationship satisfaction for those with insecure romantic attachment (Little, McNully, & Russell, 2010). Results from the current study provide evidence for the important role of kissing motives by suggesting that adopting sexual/relational kissing motives for romantic kissing may also buffer against the negative relational outcomes associated with avoidant romantic attachment styles.

The current results also indicated that goal attainment/insecurity motives for romantic kissing are linked to decreased relationship satisfaction, but only for those with an insecure romantic attachment style (avoidant or anxious). Thus, it appears as though goal attainment/insecurity motives for romantic kissing exacerbate the negative relationship outcomes associated with insecure romantic attachment styles. This may be related to the relationships between jealously, infidelity, and romantic attachment styles. Specifically, research has determined that insecurely attached individuals commonly react negatively (e.g., want revenge, become violent) to feelings of jealousy (Sharpsteen & Kirkpatrick, 1997). Overall, relationship distress that results from infidelity related issues has a greater impact on insecurely attached couples as compared to securely attached couples (Sharpsteen & Kirkpatrick, 1997; Wang, King, & Debernardi, 2012).

In addition, the negative consequences associated with adopting goal attainment/insecurity motives for kissing (which tend to be maladaptive and indicative of relationship conflict) did not appear to impact the relationship functioning for those who are securely attached. Thus, it appears that although the most important predictor of satisfying romantic relationships is a secure romantic attachment style, kissing more often for sexual/relational motives may have a buffering effect for those with insecure romantic attachment. This is consistent with literature demonstrating that romantic attachment styles are robust predictors of both relationship quality and rela-



tionship satisfaction (see Li & Chan, 2012). In sum, no matter the reasons endorsed for romantic kissing, adopting a secure romantic attachment style is the most important component for a satisfying relationship.

Limitations and Future Directions

Although this research has advanced the field of sexuality and intimate relationships by providing evidence for the importance of motives for romantic kissing for relationship functioning, several limitations must be noted. First, the current study focused exclusively on one partner's subjective experience. Consequently, we cannot conclude how the two different motive types for romantic kissing (i.e., sexual/relational, goal attainment/insecurity) impact a romantic partner's satisfaction or how romantic kissing influences a relationship as a whole (i.e., the dyad). Future research should prioritize the recruitment of romantic dyads to examine more closely consistent or inconsistent motives for romantic kissing and how concordance in these motives relates to relationship satisfaction.

Another limitation to the current study relates to the lack of variability reported for the goal attainment/insecurity motives subscale and RAS. In fact, an examination of the means for both of these scales indicates that there may be a floor effect occurring for the goal attainment/insecurity motives subscale and a ceiling effect for the RAS. Thus, future research should aim to replicate these findings using more sensitive scales that address concerns related to variability.

Finally, the influence of relationship duration was not examined. Given that previous research has linked relationship satisfaction to relationship length/stability (Derlega et al., 2011), it is plausible that the length of one's relationship may impact the role romantic kissing motives play in overall relationship satisfaction. Research has also demonstrated that motives for sexual behavior vary depending on a person's age (Wyverkens et al., 2018). Consequently, researchers should work to identify additional variables influencing motives for kissing such as relationship durations and age.

Implications and Conclusions

The current study provides evidence of the importance of investigating motives for romantic kissing, particularly when assessing romantic relationship functioning. Our findings related to kissing motives and relationship satisfaction have important implications for a variety of relationships professionals. For researchers studying romantic relationships, our findings expand psychologists' understanding of romantic relationships and how specific behaviors (e.g., romantic kissing) impact these relationships. By examining motives for romantic kissing and their impact on relationships, the current study demonstrates that kissing is more than an evolutionary method for mate selection. This study explains the importance of romantic kissing in intimate relationships from a social psychology perspective and encourages researchers to assess how kissing may influence other aspects of romantic relationships (e.g., relationship initiation, conflict resolution).

For practitioners, our study provides useful information related to the adaptive nature of certain kissing motives (i.e., sexual/relational) as compared to others (i.e., goal attainment/insecurity motives). This information could be used to encourage romantic partners to contemplate their motives for kissing (and other sexual behaviors broadly), thereby increasing their understanding of how this behavior may influence the quality of their interactions with their partner. Furthermore, when working with insecurely attached individuals, practitioners can educate clients on both the benefits and the potentially negative effects of romantic kissing. Specifically, practition-



ers may help individuals understand that sexual/relational motives can benefit their romantic relationships, and assist them with techniques to minimize goal attainment/insecurity motives that may contribute to relationship dissatisfaction. Overall, our study provides researchers with one important conclusion: not all kissing within romantic relationships is equal.

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Competing Interests

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