

# Can You Tell That I'm in a Relationship? Attachment and Relationship Visibility on Facebook

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## Abstract

People often attempt to shape others' perceptions of them, but the role of romantic relationships in this process is unknown. The present set of studies investigates *relationship visibility*, the centrality of relationships in the self-images that people convey to others. We propose that attachment underlies relationship visibility and test this hypothesis across three studies in the context of Facebook. Avoidant individuals showed low desire for relationship visibility, whereas anxious individuals reported high desired visibility (Studies 1 and 2); however, similar motives drove both groups' actual relationship visibility (Study 1). Moreover, both avoidant individuals and their partners were less likely to make their relationships visible (Studies 1 and 3). On a daily basis, when people felt more insecure about their partner's feelings, they tended to make their relationships visible (Study 3). These studies highlight the role of relationships in how people portray themselves to others.

## Keywords

attachment, close relationships, impression management, Facebook

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Imagine two people in romantic relationships. From the moment his relationship begins, Liam tells all his friends and acquaintances about it, frequently bringing up his partner in conversation. Conversely, Olivia has been in a relationship for several months but rarely mentions her partner; she does not want her relationship to be part of how other people see her. What explains these divergent behaviors?

People are motivated to portray particular self-images to others (Leary & Kowalski, 1990); yet, despite the centrality of romantic relationships in most people's lives, little is known about when and how people incorporate their relationships into those self-images. As illustrated above, people may differ radically in their desire to make their relationship known to others, but the psychological antecedents of wanting one's relationship to be visible are unstudied.

The present research investigates *relationship visibility*—the centrality of relationships in the self-images conveyed to others. We propose that relationship visibility stems from attachment dimensions (Hazan & Shaver, 1987) and investigate this process through an impression management framework (Leary & Kowalski, 1990). Across three studies, we tested the hypothesis that avoidant attachment predicts lower desired and actual visibility, whereas anxious attachment predicts greater desired visibility. We also expected that impression management motivations, such as enhancing

self-esteem, gaining social status, and creating a specific identity, might account for the association between attachment and visibility.

## Impression Management

People may be concerned with how others perceive them and exert effort to sculpt these perceptions. Impression management theory (Leary & Kowalski, 1990) posits that people manage others' impressions of them to fulfill different goals, which include attaining social outcomes (e.g., enhancing status or acceptance by others), increasing their self-esteem, or portraying a specific identity (e.g., people's clothing in the workplace influences others' perceptions of their skills and warmth; Karl, Hall, & Peluchette, 2013). These identities that people present can include portraying the current

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self-concept, conveying a desired identity, or presenting the self to avoid an undesired identity (Leary & Kowalski, 1990).

People in romantic relationships include aspects of their partners in their self-concepts (Aron, Aron, Tudor, & Nelson, 1991), suggesting that relationships should be part of how the self is presented to others. In established relationships, people often attempt to manage others' impressions of their relationships and obscure negative aspects from others (Loving & Agnew, 2001). Couples can feel pressured to reveal the status of their relationships, because they believe it is a social expectation, but may conceal their status when they believe it will be perceived negatively or that telling others will be detrimental to the relationship (Baxter & Widenmann, 1993). Although concealing a relationship can be exciting in the short term (Wegner, Lane, & Dimitri, 1994), it may corrode long-term relationship quality (Foster & Campbell, 2005). Despite past research on keeping relationships secret, as well as a rich literature on impression management, past research has not considered the *centrality* of relationships in the self-images that people construct or individual differences in the desire to make a relationship visible. Specifically, we examine *who* is more likely to desire relationship visibility, and *why* some people want others to know about their relationships whereas others do not. Given that impression motivation is especially augmented in the public situations (House, 1980), we investigated this question in the context of Facebook.

An immensely popular social networking website (with more than 1 billion users; Facebook Newsroom, 2014), Facebook allows users to construct their own profile pages, which accurately reflect the self-concept (Back et al., 2010). Self-presentation is a central motivation behind Facebook use (Nadkarni & Hofmann, 2012), and Facebook enables relationship visibility through profile pictures, posted relationship statuses (e.g., "in a relationship with . . ."), and mentioning one's partner in status updates. Previous research has linked these relational displays to relationship quality (Carpenter & Spottswood, 2013; Papp, Danielewicz, & Cayemberg, 2012; Saslow, Muise, Impett, & Dubin, 2013).

Although displaying a relationship on Facebook falls under our definition of relationship visibility, previous research has not articulated a theoretically grounded analysis of relationship visibility. Moreover, past research has almost exclusively investigated how visibility is associated with relationship quality. In the present research, we examine individual differences as correlates of visibility; specifically, we focus on attachment dimensions, and through our investigation of relationship visibility, we link disparate fields of research on attachment theory and impression management theory.

## Adult Attachment

Attachment shapes thoughts, emotions, and behavior in romantic relationships (Collins & Allard, 2001), with individuals differing along two continuous dimensions of anxiety

and avoidance. *Anxiety* reflects the valence of self-views; those high in anxiety view themselves as unlovable and fear abandonment. Conversely, *avoidance* describes one's views of others; individuals high in avoidance dislike closeness and distrust others (Bartholomew & Horowitz, 1991; Collins & Allard, 2001). Low scores on both anxiety and avoidance reflect attachment security, whereas high scores on either dimension indicate insecure attachment. An extensive body of research has shown that anxiety and avoidance predict experiences in relationships, ranging from support seeking (Simpson, Rholes, & Nelligan, 1992) to partners separating at the airport (Fraley & Shaver, 1998), to relationship quality (Etcheverry, Le, Wu, & Wei, 2013).

Attachment also influences how individuals' partners experience the relationship; those paired with insecure individuals tend to exhibit behavior consistent with the insecure individual's working models (Kirkpatrick & Davis, 1994). In other words, insecurely attached individuals' behavior appears to produce the rejection that they expect. Partners of anxious individuals are less committed and satisfied, becoming emotionally detached in stressful situations. In turn, anxious individuals tend to be strongly influenced by their romantic partners (Slotter & Gardner, 2012). Similarly, the partners of avoidant individuals are more insecure, less trusting, and behave more negatively (Butzer & Campbell, 2008; Campbell, Simpson, Kashy, & Rholes, 2001; Simpson, 1990).

Attachment describes trait-like interpersonal insecurity, but it is also related to state-like insecurity. For instance, those who are chronically insecure (including anxiously attached individuals) feel less insecure about their relationships when their partners overemphasize their caring for the individual (e.g., telling their partners that they feel more positively about them than they really do; Lemay & Dudley, 2011). Likewise, daily insecurity about the relationship may also be related to relationship visibility, especially for individuals who are anxiously attached.

## Attachment and Relationship Visibility

Although attachment has not been specifically applied to impression management, previous research suggests a link. People attempt to manage others' impressions of them to decrease a disparity between their current images and their desired self-images (Baumeister & Jones, 1978; Leary & Kowalski, 1990). Given that insecure individuals report discrepancies between their actual and ideal selves (Mikulincer, 1995), they should be especially likely to manage others' impressions. Anxious individuals yearn to be accepted and loved by their partners (Collins & Allard, 2001), so we expect they will want to make their relationships central to their public images. Conversely, avoidant individuals likely do not want their relationships to appear central to their self-concept, due to their dislike of closeness and desire for independence (Collins & Allard, 2001; Mashek & Sherman, 2004).

Moreover, anxious and avoidant individuals may have different goals tied to impression management, which may explain their discrepancies in desired relationship visibility. People impression-manage in pursuit of social or material outcomes, self-esteem, or a certain self-image (Leary & Kowalski, 1990). For social or material outcomes, we expected that anxious individuals might believe that their relationships bring them higher social status than do avoidant individuals. In general, people are motivated to achieve social approval for their relationships (e.g., Leslie, Huston, & Johnson, 1986). We are not suggesting that avoidant individuals do not desire relationships, but given that anxious individuals seek high closeness in their relationships, they might be more likely to view displaying a relationship as socially desirable. In terms of self-esteem goals, anxious individuals tend to report negative self-views (Collins & Read, 1990), so relationship visibility may be one means of restoring their self-worth. In terms of self-image goals, avoidant individuals may be motivated to make their relationships less visible to be perceived as independent from their partners, given that they value independence (Collins & Allard, 2001). However, anxious people likely do not desire perceptions of independence. Self-image goals may also encompass relationship quality. Both anxious and avoidant individuals have poor relationship quality (Etcheverry et al., 2013), so their beliefs about other people's perceptions of their relationship quality may drive their decisions to make their relationships more or less visible to others.

## The Current Studies

Romantic relationships shape the self-concept (e.g., Aron et al., 1991), so considering the role of relationships in self-presentation is essential to understanding impression management (Leary & Kowalski, 1990). The present research aimed to determine whether attachment (Hazan & Shaver, 1987) underlies the decision to make a relationship more, versus less, visible. Specifically, we expected that anxious individuals would desire to make their relationships a central part of their self-image on Facebook, whereas avoidant individuals would not (Hypothesis 1a). We expected this pattern of effects would also emerge for actual relationship visibility (Hypothesis 1b), particularly for avoidant individuals. However, anxious individuals' desired visibility might not translate into reality, given that their partners influence them (Slotter & Gardner, 2012). We also anticipated that individuals' attachment avoidance would predict their partners' actual relationship visibility (Hypothesis 2), but that attachment anxiety would not.

For Hypotheses 1 and 2, we tested relatively permanent forms of relationship visibility (a dyadic profile picture and a dyadic relationship status). We were also interested, however, in more transient forms of relationship visibility, and we anticipated that on days when people felt more insecure about their partner's feelings for them, they would be more

likely to post about the relationship or their partner (Hypothesis 3a). However, we predicted that this effect would be moderated by attachment, such that anxious individuals experiencing insecurity about their partner's feelings would be particularly likely to post about their relationships on Facebook (Hypothesis 3b).

We also examined the self-presentational goals underlying desired visibility and actual visibility. We adopted an exploratory approach to these analyses and did not advance specific hypotheses, given the lack of previous research on attachment and impression management. However, we generally expected that anxious individuals would be motivated to have more visible relationships to enhance their social status and self-esteem. Both anxious and avoidant individuals might be motivated by beliefs about others' perceptions of their poor relationship quality (Etcheverry et al., 2013), but this might have differential effects on their desired and actual relationship visibility. We also expected avoidant individuals to be motivated to have less visible relationships due to the belief that others perceive them as being independent from their partners.

We tested our hypotheses across three studies (the online supplemental material is available at <http://pspb.sagepub.com/supplemental>). In Study 1, we examined the associations between attachment and both desired and actual relationship visibility (Hypotheses 1a and 1b), as well as self-presentational goals underlying these associations. In Study 2, we tested the causal effects of attachment on desired visibility (Hypothesis 1a). In Study 3, we investigated the association between attachment and partners' actual relationship visibility (Hypothesis 2). We also examined whether daily variations in insecurity about a partner's feelings are associated with more relationship visibility (Hypothesis 3a) and whether attachment anxiety moderates this association (Hypothesis 3b).

## Study 1

Study 1 aimed to test whether anxiety and avoidance are associated with relationship visibility. We also examined the interaction between anxiety and avoidance to assess attachment security. Furthermore, Study 1 explored motivations underlying relationship visibility, based on self-presentation goals from the impression management literature (social and material outcomes, self-esteem, and identity development; Leary & Kowalski, 1990).

In this and subsequent studies, we decided to include only heterosexual participants in the analyses. For heterosexual individuals, displaying a relationship primarily conveys to others the knowledge that an individual is in a relationship and that it is central to the self-image being portrayed. However, for non-heterosexual individuals, displaying one's relationship also discloses one's minority sexual orientation. As such, this decision may be unrelated to whether the relationship itself is central to one's self-image (see Bogaert &

Hafer, 2009), especially given that being part of a socially marginalized relationship can harm well-being (Lehmiller, 2012). As a result, relationship visibility is likely more complicated for individuals who do not identify as heterosexual. Investigating the correlates of disclosing sexual orientation on Facebook falls beyond the scope of the current research, so we excluded non-heterosexual individuals from the current analyses.

## Method

**Participants and procedure.** We recruited Facebook users in romantic relationships from Mechanical Turk (MTurk), an online marketplace where users complete tasks for compensation. Participants recruited through MTurk are more representative of the U.S. population than are typical online samples (Buhrmester, Kwang, & Gosling, 2011). We obtained usable data<sup>1</sup> from 217 participants<sup>2</sup> (42.9% male, 56.7% female, 0.5% did not report their sex; relationship duration  $M = 5.23$  years,  $SD = 5.85$ ; age  $M = 30.71$  years,  $SD = 9.23$ ).

Participants reported on aspects of their Facebook profile page, including their current profile picture and relationship status, and completed measures assessing attachment, motives for visibility, and control items. They were subsequently debriefed and compensated 50 cents, consistent with MTurk payment standards. The order of the Facebook and relationship items was counterbalanced.

## Measures

Unless otherwise noted, all items were assessed with 7-point scales (1 = *strongly disagree*, 7 = *strongly agree*).

**Relationship visibility.** Participants completed a measure of desired relationship visibility (three items;  $\alpha = .85$ ;  $M = 4.29$ ,  $SD = 1.79$ ; for example, "It is important to me that my Facebook friends can tell that I am in a relationship"). They also reported their profile picture content and current relationship status on Facebook (coded 0 = *non-dyadic*, 1 = *dyadic*). The two measures of actual visibility were correlated ( $r = .20$ ) and were averaged to create a composite measure of actual relationship visibility (0 = *no visibility* [14.7%], 0.5 = *either a dyadic profile picture or a dyadic relationship status* [64.1%], 1 = *both forms of visibility* [21.2%]).

**Attachment.** Participants completed the short form of the Experiences in Close Relationships Scale (Wei, Russell, Mallinckrodt, & Vogel, 2007; 12 items; avoidance  $\alpha = .82$ ,  $M = 2.47$ ,  $SD = 1.17$ ; anxiety  $\alpha = .81$ ,  $M = 3.50$ ,  $SD = 1.36$ ).

**Motivations.** We constructed items assessing motivations for relationship visibility based on the impression management literature and pilot testing. For the pilot test, we asked 52 participants from a small college in the Northeastern United

States to list reasons why people in relationships might or might not post their relationship statuses on Facebook. Based on these responses, we selected possible motivations that aligned with self-presentation goals from the impression management literature.

**Social outcomes.** One item assessed the extent to which relationship visibility provides social status ("Other people knowing that I am in a relationship gives me social status,"  $M = 3.94$ ,  $SD = 1.68$ ).

**Self-esteem.** One item assessed the extent to which relationship visibility provides self-esteem ("Other people knowing that I am in a relationship makes me feel better about myself,"  $M = 4.47$ ,  $SD = 1.79$ ).

**Development of identity.** We measured two aspects of identity relevant to romantic relationships. Three items assessed whether participants felt that others perceived that they had high relationship quality (e.g., "Other people think that I have a happy, stable relationship";  $\alpha = .88$ ,  $M = 5.67$ ,  $SD = 1.22$ ). Two items assessed whether participants thought others perceived them as being independent from their partners (e.g., "Other people think that I am independent from my partner";  $r = .35$ ,  $M = 4.45$ ,  $SD = 1.27$ ).

**Control measures.** We included a number of control measures, including the 10-Item Personality Inventory (Gosling, Rentfrow, & Swann, 2003; 2 items for each of five personality dimensions: agreeableness  $r = .25$ ,  $M = 5.27$ ,  $SD = 1.20$ ; extraversion  $r = .58$ ,  $M = 3.79$ ,  $SD = 1.59$ ; conscientiousness  $r = .38$ ,  $M = 5.45$ ,  $SD = 1.22$ ; neuroticism  $r = .57$ ,  $M = 3.13$ ,  $SD = 1.50$ ; and openness  $r = .36$ ,  $M = 5.02$ ,  $SD = 1.30$ ). Participants also completed the Rosenberg Self-Esteem Scale (Rosenberg, 1965; 10 items;  $\alpha = .92$ ,  $M = 3.14$ ,  $SD = .68$ ; 1 = *strongly disagree*, 4 = *strongly agree*); a measure of self-monitoring (Snyder & Gangestad, 1986; 18 items;  $\alpha = .76$ ,  $M = 3.81$ ,  $SD = .79$ ); and a measure of self-concept clarity (Campbell et al., 1996; 12 items;  $\alpha = .94$ ,  $M = 4.61$ ,  $SD = 1.43$ ).

**Time on Facebook.** Participants reported how often they use Facebook on an 8-point scale (1 = *rarely*, 8 = *more than 2 hr a day*).

## Results and Discussion

**Attachment and relationship visibility.** To assess the association between attachment and relationship visibility, anxiety, avoidance, and their interaction were entered into two multiple regressions predicting desired visibility and actual visibility, controlling for time spent on Facebook (see Table 1 for correlations between all variables).<sup>3</sup> Prior to analysis, variables were standardized. As predicted, anxious individuals desired higher relationship visibility ( $\beta = .21$ ,  $p = .002$ ,

**Table 1.** Correlations Between Attachment Dimensions, Motives, and Relationship Visibility in Study 1.

	Avoidance	Anxiety	Social status motive	Self-esteem motive	Relationship quality motive	Independent motive	Desired relationship visibility
Anxiety	.30**						
Social status motive	-.03	.03					
Self-esteem motive	-.14*	.12 <sup>†</sup>	.58**				
Relationship quality motive	-.59**	-.40**	.20*	.23*			
Independent motive	-.03	-.09	-.15*	-.16*	.01		
Desired relationship visibility	-.24**	.11 <sup>†</sup>	.20*	.38**	.30**	-.15*	
Actual relationship visibility	-.15*	.07	.009	.18*	.24**	-.16*	.39**

<sup>†</sup> $p < .15$ . \* $p < .05$ . \*\* $p < .001$ .

95% confidence interval [CI] = [0.08, 0.34]), and avoidant individuals desired lower visibility ( $\beta = -.28$ ,  $p < .001$ , 95% CI = [-0.42, -0.15]),  $F(4, 212) = 8.97$ ,  $p < .001$ ,  $R^2 = .15$ . The interaction was not significant, ( $\beta = .06$ ,  $p = .36$ , 95% CI = [-0.08, 0.21]). Also, as predicted, avoidance was negatively associated with actual visibility ( $\beta = -.19$ ,  $p = .008$ , 95% CI = [-0.34, -0.05]) and anxiety was marginally positively associated with actual visibility ( $\beta = .13$ ,  $p = .06$ , 95% CI = [-0.008, 0.28]), again controlling for time spent on Facebook. The interaction was not significant ( $\beta = .03$ ,  $p = .62$ , 95% CI = [-0.11, 0.19]),  $F(4, 212) = 2.09$ ,  $p = .08$ ,  $R^2 = .04$ .

**Motivations for relationship visibility.** We next examined associations between attachment and self-presentational motives. In each analysis, avoidance, anxiety, and their interaction were entered into a multiple regression predicting self-presentational motive, and all variables were standardized. Contrary to predictions, neither avoidance ( $\beta = -.04$ ,  $p = .55$ , 95% CI = [-0.19, 0.10]), anxiety ( $\beta = .04$ ,  $p = .60$ , 95% CI = [-0.11, 0.18]), nor their interaction ( $\beta = .000$ ,  $p = 1.00$ , 95% CI = [-0.15, 0.15]) was associated with perceived social status from others knowing about the relationship,  $F(3, 213) = 0.16$ ,  $p = .92$ ,  $R^2 = .002$ . As expected, anxiety ( $\beta = .19$ ,  $p = .007$ , 95% CI = [0.05, 0.33]) was positively associated with self-esteem from others knowing about the relationship. However, avoidance was also negatively associated with self-esteem motive ( $\beta = -.20$ ,  $p = .004$ , 95% CI = [-0.34, -0.06]); the interaction was not significant ( $\beta = .08$ ,  $p = .26$ , 95% CI = [-0.06, 0.23]),  $F(3, 213) = 4.24$ ,  $p = .006$ ,  $R^2 = .06$ . As predicted, both avoidance ( $\beta = -.52$ ,  $p < .001$ , 95% CI = [-0.63, -0.41]) and anxiety ( $\beta = -.24$ ,  $p < .001$ , 95% CI = [-0.35, -0.13]) were negatively associated with beliefs that others perceived one has having high relationship quality. There was no association with the interaction ( $\beta = .03$ ,  $p = .52$ , 95% CI = [-0.08, 0.15]),  $F(3, 213) = 48.22$ ,  $p < .001$ ,  $R^2 = .40$ . Contrary to predictions, avoidance was not associated with beliefs about others' perceptions of independence from one's partner ( $\beta = .003$ ,  $p = .97$ , 95% CI = [-0.14, 0.14]), and neither was anxiety ( $\beta = -.10$ ,  $p = .15$ , 95% CI = [-0.26, 0.04]); the interaction was marginally significant ( $\beta = -.12$ ,  $p = .08$ , 95% CI = [-0.28, 0.02]),  $F(3, 213) = 1.54$ ,  $p = .21$ ,  $R^2 = .02$ .

We then examined which motives mediated the associations between attachment and relationship visibility. We conducted two multiple mediation analyses using bootstrapping; we used 5,000 bootstrap re-samples and considered the mediation significant if the CI did not include zero (Preacher & Hayes, 2008). Self-esteem motive and perceived relationship quality motive were entered as mediators simultaneously, as the other two motives were not associated with anxiety or avoidance. All analyses controlled for time spent on Facebook.

Self-esteem motive (95% CI = [-0.17, -0.02]) and perceived relationship quality motive (95% CI = [-0.35, -0.05]) both mediated the association between avoidance and desired visibility, controlling for anxiety,  $F(5, 211) = 15.35$ ,  $p < .001$ ,  $R^2 = .25$ . Avoidant individuals reported that other people knowing about their relationships would make them feel worse about themselves and thought others perceived them to have poor relationship quality, and these accounted for their low desired relationship visibility. Similarly, self-esteem motive (95% CI = [0.01, 0.15]) and perceived relationship quality motive (95% CI = [-0.20, -0.02]) mediated the association between anxiety and desired visibility, controlling for avoidance,  $F(5, 211) = 15.35$ ,  $p < .001$ ,  $R^2 = .27$ . Anxious individuals perceived that others knowing about their relationships would make them feel better about themselves and that other people perceived them to have poor relationship quality, and these accounted for their high desired relationship visibility (Table 2).

We then considered actual visibility as an outcome. Perceived relationship quality motive (95% CI = [-0.06, -0.01]) but not self-esteem motive (95% CI = [-0.02, 0.0009]) mediated the association between avoidance and actual visibility,  $F(5, 211) = 4.58$ ,  $p < .001$ ,  $R^2 = .10$ . Avoidant individuals believed that others perceived them to have poor relationship quality, which accounted for their low actual relationship visibility. Perceived relationship quality motive (95% CI = [-0.04, -0.002]), but not self-esteem motive (95% CI = [-0.0006, 0.01]), mediated the association between anxiety and actual visibility,  $F(5, 211) = 4.58$ ,  $p < .001$ ,  $R^2 = .08$ . Anxious individuals felt that others perceived them to have low-quality relationships, which accounted for their higher actual relationship visibility (Table 3).

**Table 2.** Motives Mediating the Association Between Attachment and Desired Relationship Visibility in Study 1.

Model	Independent variable	Dependent variable	b	SE	t
Avoidance → Desired visibility	Avoidance	Self-esteem motive	-.29*	0.11	-2.68
	Avoidance	Perceived relationship quality motive	-.53**	0.06	-9.19
	Self-esteem motive	Desired relationship visibility	.27**	0.06	4.27
	Perceived relationship quality motive	Desired relationship visibility	.36*	0.12	3.07
	Avoidance <sup>a</sup>	Desired relationship visibility	-.42**	0.10	-4.14
	Avoidance <sup>b</sup>	Desired relationship visibility	-.16	0.11	-1.40
Anxiety → Desired visibility	Anxiety	Self-esteem motive	.24*	0.09	2.59
	Anxiety	Perceived relationship quality motive	-.22**	0.05	-4.42
	Self-esteem motive	Desired relationship visibility	.27**	0.06	4.27
	Perceived relationship quality motive	Desired relationship visibility	.36*	0.12	3.07
	Anxiety <sup>a</sup>	Desired relationship visibility	.26*	0.09	2.98
	Anxiety <sup>b</sup>	Desired relationship visibility	.28*	0.09	3.15

Note. Betas are unstandardized.

<sup>a</sup>The total effect without mediators present.

<sup>b</sup>The direct effect with mediators present.

\* $p < .05$ . \*\* $p < .001$ .

**Table 3.** Motives Mediating Association Between Attachment and Actual Relationship Visibility in Study 1.

Model	Independent variable	Dependent variable	b	SE	t
Avoidance → Actual visibility	Avoidance	Self-esteem motive	-.29*	0.11	-2.68
	Avoidance	Perceived relationship quality motive	-.53**	0.06	-9.19
	Self-esteem motive	Actual relationship visibility	.02	0.01	1.37
	Perceived relationship quality motive	Actual relationship visibility	.07*	0.02	3.09
	Avoidance <sup>a</sup>	Actual relationship visibility	-.05*	0.02	-2.65
	Avoidance <sup>b</sup>	Actual relationship visibility	-.008	0.02	-.39
Anxiety → Actual visibility	Anxiety	Self-esteem motive	.24*	0.09	2.59
	Anxiety	Perceived relationship quality motive	-.22**	0.05	-4.42
	Self-esteem motive	Actual relationship visibility	.02	0.01	1.37
	Perceived relationship quality motive	Actual relationship visibility	.07*	0.02	3.09
	Anxiety <sup>a</sup>	Actual relationship visibility	.03	0.02	1.81
	Anxiety <sup>b</sup>	Actual relationship visibility	.04*	0.02	2.39

Note. Betas are unstandardized.

<sup>a</sup>The total effect without mediators present

<sup>b</sup>The direct effect with mediators present.

\* $p < .05$ . \*\* $p < .001$ .

*Testing alternative explanations.* Next, we examined other variables that might also predict desired or actual relationship visibility. Prior to analysis, variables were standardized. We entered anxiety, avoidance, their interaction, and time spent on Facebook, along with agreeableness, extraversion, conscientiousness, neuroticism, openness, self-esteem, self-monitoring, and self-concept clarity, into a series of multiple regressions in turn predicting desired visibility, actual visibility, and motives for visibility. The only control variables that significantly predicted desired visibility were openness ( $\beta =$

$-.19, p = .008, 95\% \text{ CI} = [-0.33, -0.05]$ ) and time spent on Facebook ( $\beta = .21, p = .002, 95\% \text{ CI} = [0.08, 0.34]$ ); extraversion was marginally associated with desired visibility ( $\beta = .15, p = .06, 95\% \text{ CI} = [-0.006, 0.31]$ ). The association between each attachment dimension and desired visibility remained significant with control variables included. In the multiple regression predicting actual visibility, the association between avoidance and actual visibility remained significant, and the association between anxiety and actual visibility was still marginally significant. The only control variable

associated with actual visibility was self-concept clarity ( $\beta = -.20, p = .04, 95\% \text{ CI} = [0.005, 0.39]$ ).

We then tested whether these same variables might also predict the motives underlying relationship visibility. The only control variables significantly associated with self-esteem motive were openness to experience ( $\beta = -.21, p = .005, 95\% \text{ CI} = [-0.35, -0.06]$ ) and self-concept clarity ( $\beta = -.19, p = .04, 95\% \text{ CI} = [-0.37, -0.01]$ ); the associations between each attachment dimension and self-esteem motive remained significant. In the multiple regression predicting relationship quality motive, avoidance and anxiety remained significantly associated with this motive, and the motive was also associated with self-esteem ( $\beta = .22, p = .006, 95\% \text{ CI} = [0.06, 0.36]$ ).

**Discussion.** Taken together, the results of Study 1 showed that anxiety and avoidance are uniquely associated with relationship visibility. Avoidant individuals reported less desired and actual relationship visibility; anxious individuals reported more desired visibility and marginally more actual visibility. These effects remained when including control variables. Study 1 also tested possible motivations for desired and actual relationship visibility. Avoidant and anxious individuals were both motivated by their belief that others perceive them to have poor relationship quality and their belief that other people knowing about their relationships affects their self-esteem. However, these motivations had divergent effects on relationship visibility. That is, poor perceived relationship quality among anxious individuals was associated with higher desired and actual relationship visibility, whereas poor perceived relationship quality among avoidant individuals was associated with lower desired and actual relationship visibility. Likewise, anxious individuals believed that other people knowing about their relationships would make them feel better about themselves, in turn predicting higher desired relationship visibility. Avoidant individuals reported that other people knowing about their relationships would make them feel worse about themselves, which was associated with lower desired visibility.

## Study 2

Study 2 tested the causal association between attachment and desired relationship visibility by experimentally priming attachment. We expected that individuals primed with avoidance would express lower desire for relationship visibility than would those primed with anxiety. We anticipated that those primed with anxiety would report higher desire for relationship visibility than would those primed with avoidance.

### Method

**Participants.** We recruited Facebook users in relationships from MTurk and obtained usable data<sup>4</sup> from 586 participants<sup>5</sup> (46.1% male; 53.9% female; relationship duration  $M = 6.37$  years,  $SD = 6.88$ ; age  $M = 31.14$  years,  $SD = 9.35$ ).

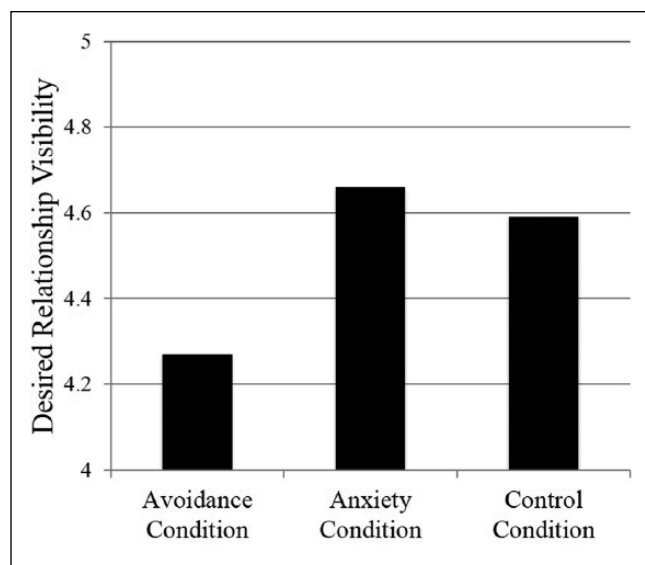
**Procedure.** Participants were randomly assigned to receive either an avoidance, anxiety, or control prime. In the avoidance condition, participants visualized a time they felt uncomfortable being too close to their partner, and in the anxiety condition, they visualized a time their partner seemed reluctant to get close to them (adapted from Bartz & Lydon, 2004). In the control condition, participants thought about their plans for the weekend. They were then asked to write a few sentences about what they had visualized. Participants subsequently reported their desired relationship visibility, were debriefed, and were compensated 50 cents.

**Measures.** Participants reported their desired relationship visibility, anxiety, and avoidance on the same measures as in Study 1 (desired visibility  $\alpha = .84, M = 4.52, SD = 1.62$ ; avoidance  $\alpha = .83, M = 2.38, SD = 1.08$ ; anxiety  $\alpha = .78, M = 3.51, SD = 1.24$ ), and reported how often they used Facebook.

## Results and Discussion

As a manipulation check, we examined the effect of condition on the measures of avoidance and anxiety. Using a between-subjects ANCOVA, we found a significant difference between conditions on the measure of avoidance, controlling for anxiety,  $F(2, 582) = 4.40, p = .01$ , partial  $\eta^2 = .02$ . A Tukey's least significant difference (LSD) post hoc test showed that participants in the avoidance condition ( $M = 2.56, SE = 0.08, 95\% \text{ CI} = [2.41, 2.72]$ ) scored significantly higher on avoidance than did the anxiety condition ( $M = 2.33, SE = 0.07, 95\% \text{ CI} = [2.18, 2.47]$ ),  $p = .03$ . In addition, individuals in the avoidance condition reported higher avoidance than did those in the control condition ( $M = 2.27, SE = 0.07, 95\% \text{ CI} = [2.14, 2.40]$ ),  $p = .004$ . There was no difference between those in the anxiety and the control conditions on avoidance,  $p = .59$ . A second between-subjects ANCOVA revealed an overall effect of condition on anxiety that approached significance, controlling for avoidance,  $F(2, 582) = 2.92, p = .06$ , partial  $\eta^2 = .01$ . A Tukey's LSD post hoc test found that those in the anxiety condition ( $M = 3.65, SE = 0.08, 95\% \text{ CI} = [3.49, 3.82]$ ) significantly differed from those in the control condition ( $M = 3.38, SE = 0.08, 95\% \text{ CI} = [3.23, 3.53]$ ) on the measure of anxiety,  $p = .02$ . There were no differences between those in the avoidance condition ( $M = 3.55, SE = 0.09, 95\% \text{ CI} = [3.37, 3.72]$ ) and those in the anxiety condition,  $p = .40$ , on anxiety; however, the means were in the predicted directions. There was also no difference between those in the avoidance condition and those in the control condition,  $p = .16$ , on anxiety.

Testing our primary hypothesis, a between-subjects ANCOVA revealed a significant main effect of condition on desired visibility, controlling for time spent on Facebook,  $F(2, 581) = 3.35, p = .04$ , partial  $\eta^2 = .01$  (Figure 1). A Tukey's LSD post hoc test revealed that individuals in the avoidance condition expressed lower desire for relationship



**Figure 1.** Effect of attachment primes on desired relationship visibility in Study 2.

visibility ( $M = 4.27$ ,  $SE = 0.12$ , 95% CI = [4.04, 4.50]) than did those in the anxiety condition ( $M = 4.66$ ,  $SE = 0.10$ , 95% CI = [4.44, 4.88]),  $p = .02$ . Moreover, individuals in the control condition ( $M = 4.59$ ,  $SE = 0.10$ , 95% CI = [4.40, 4.78]) expressed more desired visibility than did those in the avoidance condition,  $p = .04$ . There was no significant difference between those in the anxiety condition and those in the control condition,  $p = .64$ .

**Discussion.** In Study 2, we demonstrated a causal association between attachment and relationship visibility. Participants primed with avoidant attachment expressed lower desire for relationship visibility than did those primed with anxious attachment, suggesting that attachment alters desired visibility. Those in the avoidance condition also reported marginally less desire for visibility than did those in the control condition; the anxiety and control conditions did not differ. These findings, however, are only from one member of the couple. Given the importance of a dyadic approach in understanding relationship processes (e.g., Campbell & Simpson, 2013), it is necessary to consider whether partners might influence each other's relationship visibility. Therefore, Study 3 focused on actor and partner effects of attachment on relationship visibility.

### Study 3

Study 3 extended the previous studies in two key ways. First, we collected data from both members of romantic couples, allowing us to test whether one partner's attachment predicts the other partner's relationship visibility. Previous research has demonstrated that one partner's attachment influences the other partner's feelings about the relationship (Campbell

et al., 2001; Simpson, 1990). Second, we assessed romantic partners' daily Facebook use over 2 weeks, enabling us to examine different forms of actual relationship visibility. These varied in level of permanence, with relationship status and profile picture as more enduring and daily posting as more transient. Also, because people's insecurity about their partners' feelings can vary from day to day (Lemay & Dudley, 2011), we tested whether and how daily insecurity influences relationship visibility.

In Study 3, we predicted that people higher in avoidance and those with more avoidant partners would be less likely to post a dyadic relationship status. Based on the marginal association between anxiety and actual visibility in Study 1, we did not think that anxiety would be directly associated with more permanent forms of relationship visibility such as having a dyadic profile picture or relationship status. However, we predicted that it would be associated with daily posting, as one's partner has less control over this form of visibility. Finally, we expected that on days when people felt more insecure about their partner's feelings than they typically do, they would share more relationship-relevant information on Facebook. However, we expected this association to be moderated by attachment, such that anxious individuals in particular would post more about their relationships on days when they felt insecure.

### Method

**Participants.** Participants were 108 heterosexual dating couples (216 individuals)<sup>6</sup> recruited from a small university in Canada; each partner was paid C\$40 for participating. The participants ranged in age from 19 to 31 ( $M = 21.05$ ,  $SD = 0.94$ ) and had been together from 2 to 73 months ( $M = 19.78$ ,  $SD = 15.49$ ; 9% cohabiting). To be eligible for the study, both partners had to participate and be current Facebook users.

**Procedure.** On the first day of the study, participants completed background measures and "friended" the study's Facebook page. On joining the study, they consented to allow us to download their Facebook profiles. Participants completed an online survey each night for 2 weeks, independently from their partners. To maximize compliance with the daily part of the protocol, reminder emails were sent to the participants who had not completed their daily diaries by 10:00 p.m. each night. On average, participants completed 12.45 diaries across the 14 days (range = 1-14,  $SD = 3.72$ ) for a total of 2,689 days across participants.

### Background Measures

**Actual relationship visibility.** From the downloaded Facebook profiles, two trained coders rated each participant's relationship status (1 = *in a relationship* [with partner's name], 2 = *in a relationship* [without partner's name], 3 = *married or*



engaged, 4 = single, 5 = in an open relationship, 6 = no status listed, 7 = other). The same coders also rated whether or not the couple was present in the photo (1 = dyadic photo, 0 = non-dyadic photo). Because both couple members participated, after the ratings were complete, coders verified that the other person in the photo was the person's partner. Coders were blind to participants' scores on the survey measures.

**Attachment.** Participants completed the same measure of attachment as in previous studies (avoidance  $\alpha = .87$ ,  $M = 1.97$ ,  $SD = .96$ ; anxiety  $\alpha = .79$ ,  $M = 3.28$ ,  $SD = 1.24$ ).

### Daily Measures

**Facebook posts.** Participants responded to one item ("I shared information about my relationship or my partner on Facebook today; that is, posted a status update, wall post, photo comment, or photos about or with my partner"; 1 = not at all, 7 = very much).

**Daily feelings of insecurity.** Participants responded to one item ("I felt insecure about my partner's feelings for me today"; 1 = not at all, 7 = very much).

**Time spent on Facebook.** Participants reported the number of minutes they spent on Facebook each day (range = 0-600,  $M = 32.07$ ,  $SD = 49.08$ ).

### Results and Discussion

**Coding Facebook profiles.** Coders had perfect agreement regarding participants' Facebook relationship statuses ( $\kappa = 1.00$ ). Participants with an "in a relationship" status (with or without their partner's name) or who indicated they were married/engaged were re-coded 1 (dyadic relationship status), and those without a status or had an "other" status were coded 0 (non-dyadic relationship status).

The coding of participants' Facebook profile picture resulted in high initial agreement ( $\kappa = .97$ ). The coders only disagreed on two of the photos, and after discussion, both of these photos were considered non-dyadic. As in Study 1, having a dyadic relationship status and having a dyadic profile picture were positively correlated ( $r = .25$ ). We averaged these two variables to create a composite measure of actual relationship visibility (0 = no visibility [39.3%], 0.5 = either a dyadic profile picture or a dyadic relationship status [37.7%], 1 = both forms of visibility [23.0%]).

**Attachment and relationship visibility.** To test our first prediction that avoidant individuals and the partners of people high in avoidance would have less visible relationships on Facebook, we used multilevel modeling with mixed models in SPSS 20.0. The Actor Partner Interdependence Model (APIM) guided the analyses (Kenny, Kashy, & Cook, 2006), such that actor avoidance, actor anxiety, partner avoidance,

**Table 4.** Attachment Predicting Actual Relationship Visibility in Study 3.

Model	b	SE	t	df	p	95% CI
Avoidance	-.13	0.03	-4.78	171.56	<.001	[-0.18, -0.08]
Anxiety	-.01	0.02	-0.59	182.94	.56	[-0.06, 0.03]
Partner avoidance	-.07	0.03	-2.61	173.37	.01	[-0.12, -0.02]
Partner anxiety	-.001	0.02	-0.08	188.41	.93	[-0.04, 0.04]

Note. CI = confidence interval.

and partner anxiety were entered as predictors into the model simultaneously. In these analyses, we report unstandardized betas, which can be interpreted as the increase in the dependent variable for every one-unit increase in the independent variable. All analyses controlled for time spent on Facebook. As expected, more avoidant participants had less visible relationships on Facebook (see Table 4). Moreover, controlling for an individual's own attachment, those who had a partner who was higher in avoidance also had less visible relationships on Facebook. Anxiety was not significantly associated with a person's own or his or her partner's actual relationship visibility on Facebook, and there were no significant interactions between avoidance and anxiety predicting relationship visibility.

**Daily insecurity and relationship posting.** Our next set of predictions concerned fluctuations in a person's feelings of insecurity and daily posting about their relationship on Facebook. We tested hypotheses with multilevel modeling using mixed models in SPSS 20.0, testing a two-level cross model with random intercepts with persons nested within dyads, and person and days crossed to account for the fact that both partners completed the daily surveys on the same days. To avoid confounding within- and between-person effects, we used techniques appropriate for a multilevel framework, partitioning the daily predictor (i.e., feelings of insecurity) into their within- and between-variance components, which were person-mean centered and aggregated, respectively (Raudenbush, Bryk, Cheong, & Congdon, 2004). As such, for the analyses with daily-level predictors, the unstandardized beta is interpreted as the change in the dependent variable for every one-unit deviation from the person's own mean on the independent variable. We again controlled for time spent on Facebook. On days when people felt more insecure about their partner's feelings than they typically do, they posted more relationship-relevant information on Facebook ( $b = .03$ ,  $SE = 0.01$ ,  $t = 2.17$ ,  $p = .03$ , 95% CI = [0.003, 0.05]). A person's daily feelings of insecurity were not significantly associated with his or her partner's daily posting on Facebook.

Next, we tested whether anxiety moderated the effect of daily insecurity on relationship visibility. First, anxiety,  $b = .29$ ,  $SE = 0.04$ ,  $t(126.80) = 6.71$ ,  $p < .001$ , 95% CI = [0.21, 0.38], and avoidance,  $b = .26$ ,  $SE = 0.05$ ,  $t(138.85) = 4.95$ ,

$p < .001$ , 95% CI = [0.016, 0.37], were both significantly associated with daily insecurity. In addition, people who were higher in anxiety posted more information about their relationship on Facebook on a daily basis,  $b = .05$ ,  $SE = 0.01$ ,  $t(1066.84) = 3.05$ ,  $p = .005$ , 95% CI = [0.02, 0.07], and people higher in avoidance posted less information about their relationship,  $b = -.05$ ,  $SE = 0.02$ ,  $t(939.11) = -2.42$ ,  $p = .02$ , 95% CI = [-0.09, -0.01]. We then entered attachment anxiety, avoidance, daily insecurity, and the interaction between daily feelings of insecurity and both anxiety and avoidance as predictors of daily relationship posting. However, in contrast to our predictions, anxiety,  $b = -.001$ ,  $SE = 0.01$ ,  $t(2119.33) = -0.05$ ,  $p = .96$ , 95% CI = [-0.02, 0.02], did not moderate the association between daily feelings of insecurity and relationship posting. Avoidance also did not moderate this effect,  $b = .003$ ,  $SE = 0.01$ ,  $t(2059.10) = 0.23$ ,  $p = .83$ , 95% CI = [-0.02, 0.03].

**Testing alternative explanations.** In Study 3, we also tested for combined effects of partner's attachment styles; that is, whether the effect of a person's anxiety or avoidance was strengthened or attenuated based on his or her partner's anxiety or avoidance (i.e., actor-partner interactions). We did not find any significant interactions between an actor's anxiety and avoidance and their partner's anxiety and avoidance, suggesting that, in the current study, partners' attachment styles do not interact in a consistent way to predict relationship visibility. Moreover, we examined whether the daily effects held when controlling for overall amount of information posted about the self that day to determine whether there is a unique effect of posting about the relationship. Although the effect of daily insecurity on daily posting was slightly weakened ( $b = .02$ ,  $SE = 0.01$ ,  $t = 1.65$ ,  $p = .10$ , 95% CI = [-0.01, 0.04]), the overall pattern of effects remained the same. The slight diminishing of the effect on relationship posting is likely because daily posting about the relationship and daily posting about the self were correlated ( $r = .39$ ,  $p < .001$ ).

**Discussion.** Study 3 investigated relationship visibility from a dyadic perspective. Consistent with the previous studies, avoidant individuals had less visible relationships, whereas anxiety did not directly predict more permanent forms of visibility. Moreover, the partners of people high in avoidance also had less visible relationships on Facebook, controlling for their own avoidance and anxiety. On a daily basis, people were more likely to make their relationships visible by posting about their partners or their relationships on days when they felt more insecure about their partner's feelings for them. However, neither anxiety nor avoidance moderated these effects.

## General Discussion

Some people ardently want others to see that they are in a relationship; others prefer their relationships to be less

visible. Relationship visibility is conceptualized as a form of impression management (Leary & Kowalski, 1990), which reflects whether individuals want their relationships to appear to be an important aspect of their self-concept. These studies focused on relationship visibility in the context of Facebook, a particularly rich environment for understanding this construct, because users determine the visibility of their relationships. Concealing a relationship corrodes relationship quality (Foster & Campbell, 2005), so understanding antecedents of public displays of a relationship provides insights into the maintenance of romantic relationships. Moreover, given the centrality of relationships in the self-concept (Aron et al., 1991), considering the role of relationships in the self-images that people convey to others is crucial for understanding impression management.

Three studies tested the central predictions that avoidance would predict less desired and actual visibility, whereas anxiety would predict greater desired visibility. Study 1 established support for the predicted association between attachment and relationship visibility and tested motivations underlying relationship visibility. Anxious individuals believed that others knowing about their relationships would make them feel better about themselves, which was associated with desired visibility, and that other people perceived that they had poor relationship quality, which was associated with desired and actual visibility. Avoidant individuals believed that others knowing about their relationships would make them feel worse about themselves, which was associated with lower desired visibility, and that others thought they had poor relationship quality, which was associated with lower desired and actual visibility. Study 2 found experimental evidence for the link between attachment and relationship visibility. Individuals primed with anxiety reported greater desire for visibility than did those primed with avoidance. Study 3 examined relationship visibility in a dyadic daily diary paradigm. More avoidant individuals and the partners of people higher in avoidance reported less overall actual relationship visibility. Furthermore, on days when people felt more insecure about their partner's feelings for them, they posted more about their relationships on Facebook than usual.

## Implications and Future Directions

The current research extends both impression management theory and attachment theory by fusing these previously disparate literatures. The majority of studies on attachment in romantic relationships have only examined its effects on dynamics within the relationship itself. This research, however, suggests that attachment also affects the extent to which people want their romantic relationship to be a central part of the image that outsiders form of them and is the first to our knowledge to apply attachment theory to the realm of impression management. Notably, a person's attachment avoidance was associated with his or her partner's impression

management, suggesting that in the context of relationships, impression management may be a dyadic process. Our examination of motives underlying impression management was largely exploratory and found that the same motives (self-esteem maintenance and beliefs about others' perceptions of one's relationship quality) mediated both anxious and avoidant individuals' relationship visibility.

Both anxious and avoidant individuals were motivated by thinking that others perceived them to have poor relationship quality, but this belief translated into high relationship visibility for anxious individuals and low relationship visibility for avoidant individuals. This research suggests that relationship visibility may fulfill distinct impression management goals for different individuals. The self-images that people convey to others can include the current self-concept (so that others hold correct perceptions of them) or the desired self (the person they would like to be; Leary & Kowalski, 1990). People who make their relationships visible to others are perceived to have higher relationship quality (Emery, Muise, Alpert, & Le, in press). Given that both anxious and avoidant individuals have poor relationship quality (Etcheverry et al., 2013), anxious individuals may be constructing an image of their desired selves, whereas avoidant individuals may be creating images of their actual selves. However, future research should test this prediction more directly.

Although our hypotheses were largely supported, it was surprising that anxiety did not moderate the effects of daily insecurity about a partner's feelings on daily posting about the relationship, given previous research on daily insecurity among anxious individuals (Lemay & Dudley, 2011). Our primary hypothesis for the daily analyses concerned anxious individuals, but we were also surprised that avoidance did not moderate these effects either. In other words, the effects of daily insecurity on daily relationship visibility seem to hold for all individuals, even those high in avoidance. At first glance, this result appears to contradict our other findings that avoidant individuals express low desire for relationship visibility and tend not to make their relationships visible to others. However, it suggests that there may be a difference between more permanent forms of relationship visibility (e.g., a profile picture or relationship status) and more transient ones (e.g., daily posting). Perhaps attachment, as a process that describes how people chronically view the self and others, is more directly relevant for more permanent relationship visibility, whereas daily changes in how people view their partners may be more pertinent to transient relationship visibility.

These findings suggest the utility of Facebook as a context for studying how individuals portray their relationships to others. Facebook can be a valuable means of examining behaviors that are difficult to investigate through other methods (Wilson, Gosling, & Graham, 2012). Facebook provides a clear set of behaviors for operationalizing relationship visibility (a dyadic profile picture, a relationship status, and posting about one's partner), but in the offline world, relationship

visibility may be subtler. Examining relationship visibility in the offline world would require determining all possible ways that people could refer to their partners in conversation or subtly display their relationships.

However, this could be an important step for future research. It would be fascinating to examine whether people spontaneously mention their relationships in conversation to make their relationships visible. We would expect specific offline behaviors to parallel our findings with online behavior: For example, our findings for posting a relationship status or having a dyadic profile picture might map onto the act of wearing a wedding ring, whereas posting about the relationship is likely analogous to mentioning one's partner in casual conversation. Creating a discussion paradigm to observe when people mention their partners to new acquaintances would be a fruitful next step. Furthermore, such a study would enable a more nuanced examination of what constitutes relationship visibility. There may be a difference, for instance, between mentioning one's partner's name in conversation and talking about one's relationship, and the language used in the process of making one's relationship visible might reflect relationship quality or other motivations underlying relationship visibility. Future research would benefit from coding subtler forms of relationship visibility.

### *Strengths and Limitations*

The present studies investigated the novel idea of relationship visibility. Although previous research has examined keeping one's relationship secret (Foster & Campbell, 2005), individual differences and motivations underlying the desire and decision for others to know about one's relationship have not previously been investigated. This research suggests that relationships form part of the self-images that people convey to others, and it fuses distinct literatures on attachment orientation and impression management.

These questions were examined across survey, experimental, daily experience, and dyadic methodologies; our samples included diverse age groups and relatively equal numbers of male and female participants. These varying methodologies enable greater confidence in the internal and external validity of our findings. Some findings were robust across different samples and methodologies. For instance, the effects of both anxious and avoidant attachments on desired relationship visibility were established correlationally in Study 1 and were replicated experimentally in Study 2. Likewise, the association between avoidance and actual visibility was consistent across the different samples in Studies 1 and 3. At the same time, the association between anxiety and actual visibility was less clear. In Study 1, the direct association was marginally significant, but in Study 3, we did not find any effects of actor or partner anxiety on actual visibility. We suspect that given the influence that anxious individuals' partners exert on them (e.g., Slotter & Gardner, 2012), it is their partners who determine their actual relationship visibility, although we did

not directly test this hypothesis. As a result, including partner effects in Study 3 may have resulted in the previously marginal association becoming non-significant. This explanation is likely considering that one partner's anxiety is associated with the other partner having less interest in closeness (Collins & Read, 1990); that is, anxious individuals may tend to have avoidant partners.

The sample sizes in all three studies exceeded 200 participants, increasing our confidence that our analyses possessed sufficient statistical power. However, although Internet samples tend to be more representative than college samples, the participants in this study tended to be primarily White, and we only examined relationship visibility among heterosexual individuals. Future research would benefit from more diverse samples; for example, comparisons of relationship visibility in heterosexual and non-heterosexual populations would be valuable. For instance, in non-heterosexual populations, relationship visibility might serve the double function of showing that the relationship is central to one's self-concept and making a sexual minority identity visible to one's social network.

Although Study 3 examined the dyadic nature of relationship visibility, the current research did not examine how partners react to each others' relationship visibility. That is, if partners have different desires for relationship visibility or different levels of actual relationship visibility, this discrepancy could strain relationship quality. Likewise, it would be informative to examine how partners negotiate the decision and timing of posting a relationship status (as doing so requires the approval of one's partner), as well as which partner posted a relationship status or dyadic profile picture first. Examining these questions would shed further light on relationship visibility as a dyadic process.

Another limitation of the present research is that it solely investigated relationship visibility on Facebook. Although Facebook is a useful context for studying relationship visibility, future studies should extend it to other offline environments. Facebook may differ from other contexts because information reaches multiple audiences at once, and because partners are often friends on Facebook, so they may be more aware of one another's level of relationship visibility than they would be in the offline world.

This research focused on insecurely attached individuals, but we tested the interaction between anxiety and avoidance to examine the association between secure attachment and relationship visibility. Unfortunately, the results of the current research were inconclusive for secure attachment; none of the interactions was significant. This unresolved question is a limitation of the current research, and future research might benefit from specifically investigating secure attachment in the context of relationship visibility. If the control condition in Study 2 includes securely attached individuals, then perhaps secure individuals desire relationship visibility just as much as do anxious individuals, but different motives underlie this desire.

## Conclusion

Romantic relationships do not exist in isolation; people experience them through the lens of their broader social environments, and in turn, they must decide whether to convey information about their relationships to others. The desire and decision to make a relationship visible to others reflect people's fears or aspirations for closeness with their romantic partners, with avoidant individuals eschewing relationship visibility and anxious individuals yearning for it. These studies suggest that people's views of themselves and others shape the centrality of their relationships in the self-concepts that they stage for the outside world.

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## Notes

1. Initially, we received 355 responses; however, 97 did not meet our eligibility criteria (were not in a relationship, did not have a Facebook account, or did not have a partner with a Facebook account), submitted multiple surveys, or failed an attention check. An attention check is a question designed to determine whether participants are reading questions (Oppenheimer, Meyvis, & Davidenko, 2009), which may especially be a problem on MTurk. We also excluded 41 non-heterosexual participants from analyses.
2. Recent research showing associations between relationship quality and posting a dyadic profile picture used 115 participants from MTurk (Saslow, Muise, Impett, & Dubin, 2013, Study 1); given that we were also testing mediation and ruling out alternative explanations in this study, we expected that we would need a slightly larger sample than Saslow and colleagues (2013) collected to detect similar effects.
3. In this and subsequent studies, we re-ran all key analyses including gender, relationship duration, and the interaction between these and both attachment orientations to determine whether gender or relationship duration moderated any of our effects. In Study 1, there was a significant interaction between anxiety and relationship duration predicting actual relationship visibility ( $\beta = -.20, p = .02, 95\% \text{ confidence interval [CI]} = [-0.32, -0.03]$ ), such that highly anxious individuals were more likely to make their relationships visible when they had been in relationships

for a shorter time, compared with a longer time. Conversely, less anxious individuals were more likely to make their relationships visible when they had been in those relationships for a longer versus a shorter time. In all other key analyses in Studies 1 to 3, gender and relationship duration were not significant moderators. The pattern of all effects studies remained the same when gender and relationship duration were controlled.

4. We initially received 927 responses, but prior to data analysis, data were cleaned as in Study 1. We also excluded responses from 4 participants who guessed the purpose of the study and 22 participants who did not complete the essay prime. In addition, participants indicated whether they could think of a time such as the one in the prime; responses from 10 participants who indicated that they were “completely unable to” (a “1” on a 7-point scale) were removed. We excluded responses from 96 non-heterosexual participants.
5. The attachment prime in this study was adapted from Bartz and Lydon (2004, Study 1), so we also used this study as a basis for determining sample size. Bartz and Lydon (2004, Study 1) reported a sample size of 245 participants. However, MTurk samples can reduce statistical power, necessitating larger samples to detect effects comparable with those in traditional samples. This difference arises from MTurk participants paying significantly less attention to study materials (Goodman, Cryder, & Cheema, 2013), which may particularly affect experimental manipulations. We estimated that we would need a larger sample than reported by Bartz and Lydon (2004) to be confident that we possessed sufficient power to avoid Type II errors.
6. The measures in this study were collected as part of a larger investigation of Facebook use and jealousy in romantic relationships (Muise, Christofides, & Desmarais, 2014). As such, the sample size was based on Marshall, Bejanyan, Di Castro, and Lee’s (2013, Study 2) daily diary study on jealousy due to Facebook use, which recruited 108 couples.

### Supplemental Material

The online supplemental material is available at <http://pspb.sagepub.com/supplemental>.

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