ATTACHMENT STYLES AND INTIMATE TELEVISION VIEWING: INSECURELY FORMING RELATIONSHIPS IN A PARASOCIAL WAY

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ABSTRACT

Attachment theory was investigated as an alternative interpersonal theory for understanding how audience members form parasocial relationships with television personalities. Attachment theory posits that people develop relationships in either a secure or insecure fashion. We explored whether attachment styles influenced the extent to which individuals engage in parasocial interaction. A total of 115 students completed the parasocial scale and two attachment style questionnaires. Results provided evidence that attachment styles are related to parasocial behavior: Anxious-ambivalents were the most likely to form parasocial bonds, Avoidants were the least likely to develop such relationships, and Secures were in the middle, with the more mistrusting Secures showing a tendency to engage in parasocial interaction. The discussion focuses on the implications of these findings for the attachment process.

KEY WORDS • attachment behavior • parasocial interaction • television viewing

Exploring how people form attachments provides insight regarding how they experience close relationships and interact with significant others. In particular, the application of Bowlby's (1969, 1973, 1980) infant–parental attachment theory to subsequent adult relationships (e.g., Hazan & Shaver,

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1987) has generated a wealth of information regarding the development and maintenance of romantic relationships. The primary purpose of this study was to examine the applicability of attachment theory to another context, parasocial interaction, and expand its scope to a mediated context. We begin by discussing research devoted to parasocial interaction and argue that attachment theory may provide a useful theoretical framework for this domain. Next, we provide a brief outline of the theoretical underpinnings of attachment theory and highlight the mental schemas, relational behavior and outcomes associated with three basic attachment styles (Secure, Avoidant, Anxious-ambivalent). We then present an empirical study and end by exploring the potential new insights learned about both parasocial interaction and the attachment process.

'Parasocial interaction' was initially defined as the seeming face-to-face relationship that develops between a viewer and a mediated personality (Horton & Wohl, 1956). Within the past couple of decades the empirical investigation of this phenomenon has grown. Studies have examined viewers' parasocial relationships with: (i) television newscasters (Houlberg, 1984; Levy, 1979; Perse, 1990; Rubin, Perse, & Powell, 1985); (ii) favorite television performers (Hoffner, 1996; Rubin & McHugh, 1987); (iii) favorite soap opera characters (Perse & Rubin, 1989; Rubin & Perse, 1987); (iv) favorite sitcom characters (Auter & Palmgreen, 1992) and (v) television shopping hosts (Grant, Guthrie, & Ball-Rokeach, 1991; Stephens, Hill, & Bergman, 1996).

At first, parasocial relationships were viewed as the fulfillment of a need for interaction by those individuals whose primary social needs were unmet (Nordland, 1978). It was thought that the viewer would come to know and relate to the media personality in relatively the same manner as he or she would to a real life friend and, hence, possibly have several functions of companionship fulfilled through the media figure. Along these lines, Koenig and Lessan (1985) found that viewers regarded their favorite television performer as closer to them than an acquaintance, but not as close as a friend. Thus, they felt parasocial interactions could be referred to as 'quasi-friendships' for the viewer. Relatedly, Rubin et al. (1985) hypothesized that parasocial interaction resulted from loneliness, yet they found no significant link between it and parasocial interaction (see also Tsao, 1996). Rather, their findings indicated that these imaginary social interactions resulted from the viewer's perception of the media persona as similar and real. Parasocial interactions are now argued to stem from affective interpersonal involvement with the media personality (Rubin & Perse, 1987).

Consequently, this line of research has been theoretically grounded in a relational development framework (Perse & Rubin, 1989; Rubin & Perse, 1987). As Perse and Rubin (1989) note, people may use the same cognitive processes for both mediated and interpersonal contexts. In particular, three theoretical perspectives provide insights into the formation of parasocial relationships. One is uncertainty reduction theory (Berger, 1986; Berger & Calabrese, 1975), which holds that relationships develop over time through

a process of increased certainty. As uncertainty decreases, liking increases. Relationships are established through the processes of learning to predict the other's behavior. With regard to parasocial interactions, as viewers reduce their uncertainty of media personalities, they will perceive deeper intimacy with, and liking for, mediated characters. Second, and similarly, personal construct theory (e.g., Delia, O'Keefe, & O'Keefe, 1982; Kelly, 1955) suggests that viewers of media figures develop a sense of 'knowing' media characters by applying their interpersonal construct systems to the parasocial context (Perse & Rubin, 1989). It is by employing these individualized construct systems that people make sense of the world (Kelly, 1955). Third, social exchange theory (e.g., Homans, 1961; Thibaut & Kelley, 1959) offers explanatory value to the process of parasocial interaction by connecting intimacy and the relationship's importance to a cost and reward assessment. Put simply, people try to achieve pleasure and avoid pain. Costs refer to embarrassment, anxiety, and high physical and/or mental effort, whereas rewards entail anything that individuals find enjoyable. A parasocial interaction with a media personality would appear to have a high reward and low cost exchange. While scholars (e.g., Perse & Rubin, 1989) have demonstrated the applicability of these theories in helping us understand the nature of parasocial interaction, we want to extend the empirical work by juxtaposing another relational framework in this domain, attachment theory.

Recent research suggests that attachment theory can be applied to a variety of non-intimate and/or non-romantic relationships. For instance, research indicates that attachment theory may be useful when trying to understand behaviors in the workplace (Hardy & Barkham, 1994) and the development of religious beliefs (Kirkpatrick & Shaver, 1992). Studying attachment processes in such contexts may provide insight regarding how relational needs impact a variety of social relationships in light of a compensatory framework. It is possible that insecurely attached individuals may attempt to satisfy their relational needs via a variety of diverse social outlets in comparison to their securely attached counterparts. In fact, some of Kirkpatrick's research suggests that religious involvement may serve as a compensatory function for insecurely attached individuals (Kirkpatrick, 1997; Kirkpatrick & Shaver, 1990).

There is reason to believe that parasocial relationships function similarly to 'real life' relationships in terms of attachment behaviors. Relationships with TV personalities exhibit to some degree the three fundamental properties of adult attachment as identified by Weiss (1982, 1991). First, individuals will attempt to reduce the distance between themselves and their attachment figure (i.e., proximity seeking; Weiss, 1982, 1991). Indeed, research has documented that people like to stay informed on public figures who interest them, not only collecting trivia about them (Ferguson, 1992), rearranging schedules, or setting VCRs to tape television broadcasts (Rubin & Bantz, 1989), but sometimes even attempting to contact them through fan letters or in person (Leets, deBecker, & Giles, 1995). Second, the presence of the attachment figure should provide a sense of security

(i.e., secure base; Weiss, 1982, 1991). Unfortunately, there is little direct research within the domain of parasocial interaction on the way people integrate these relationships into their lives (Turner, 1990). However, studies have revealed that companionship is a salient viewing motive for many types of viewers (Caughey, 1984; Perloff & Krevans, 1987; Rubin, 1983). In addition, Perse (1990) found that, among several variables, feeling happy while watching the news predicted parasocial interaction with a local newscaster. Third, there should be some form of protest when separation from an attachment figure is imminent (i.e., separation protest: Weiss, 1982, 1991). For example, ABC aired a television series during the 1994–1995 fall season titled 'My so-called life' (Herskovitz & Zwick, 1993). It received rave reviews and dedicated fan support, but after 19 episodes the show was canceled. A viewer-initiated group calling itself 'Operation Life Support' organized a campaign to save the series (Blais, Kreng, & Martelli, 1995). Arguably, with this particular case, viewers may have protested because of an imminent separation from their favorite media personality. In several important ways, attachment to parasocial figures appears to mirror attachment processes to actual people.

Based on this research, we decided to explore how attachment styles are related to the development of parasocial relationships. We believe that examining parasocial interaction from an attachment perspective may provide additional insights regarding this quasi-relational phenomenon. More importantly, we hope that such an investigation will contribute to our understanding of attachment processes in non-intimate relationships.

According to Bowlby (1969), the process by which children form attachments to caregivers can be viewed as a behavioral system that functions to increase the likelihood that infants' needs will be met. Separation from caregivers will result in behaviors designed to re-establish contact (Bowlby, 1973). Over the course of time, children's repeated caregiver experiences lead to the formation of attachment styles, mental models, or expectations about significant others in terms of their availability, trustworthiness, and responsiveness (Ainsworth, Blehar, Waters, & Wall, 1978). Once developed, these attachment beliefs are thought to be relatively stable (Bowlby, 1973), although somewhat malleable through subsequent relational experiences (Feeney & Noller, 1992; Shaver & Hazan, 1987).

While several different constellations of attachment styles have been identified, a three-category scheme has received the most attention (for explication of a four-category scheme, see Bartholomew, 1990; Bartholomew & Horowitz, 1991). First, people with a Secure attachment style tend to view themselves (Feeney & Noller, 1990; Shaver & Hazan, 1987) and others (Shaver & Hazan, 1987) in a positive light. Moreover, these individuals tend to hold positive relational expectations (Baldwin, Fehr, Keedian, Seidel, & Thompson, 1993) and believe that real love exists and is not fleeting (Shaver & Hazan, 1987). Secure attachment beliefs are thought to be the result of caregivers appropriately attending to one's needs, and being available, supportive, and loving (Ainsworth et al., 1978; Kobak & Sceery, 1988), especially during times of distress (Kobak &

Sceery, 1988). The next two attachment styles represent insecure relational beliefs. People with Avoidant attachment styles tend to hold more pessimistic views about relationships, themselves, and others (Feeney & Noller, 1990; Shaver & Hazan, 1987). In particular, Avoidant individuals have a difficult time trusting others and tend to think that love is transitory, if real at all (Feeney & Noller, 1990; Shaver & Hazan, 1987). The development of Avoidant attachment beliefs has been linked to rejection, unresponsiveness, and hostility on the part of early caregivers (Ainsworth et al., 1978; Kobak & Sceery, 1988), perhaps preventing these avoidantly attached individuals from forming close relationships with those who care for them. Finally, Anxious-ambivalent attachment results in people who tend to hold a more negative view of the self (Collins & Read, 1990) while idealizing their relational partner (Feeney & Noller, 1992). These individuals believe that falling in love is easy, but question their partner's commitment (Shaver & Hazan, 1987). Anxious-ambivalent beliefs develop through inconsistent, inappropriate, and insensitive parental responses to a child's attachment needs (Ainsworth et al., 1978; Hindy & Schwarz, 1994).

These relatively stable attachment styles influence the extent to which people engage in a variety of behaviors in close, adult relationships. Compared with insecure individuals, people with a Secure attachment style tend to be more sociable (Duggan & Brennan, 1994), possess more social skills (Kobak & Sceery, 1988), confront conflict in a more integrating manner (Pistole, 1989), express more positive affect (Simpson, 1990), engage in more self-disclosure (Pistole, 1993), seek more support during times of distress (Mikulincer & Florian, 1995), and are more committed to their relational partners (Pistole, Clark, & Tubbs, 1995). By comparison, Avoidant individuals are less likely to socialize (Duggan & Brennan, 1994), attempt to maintain more distance from others (Feeney & Noller, 1990), display more hostility (Kobak & Sceery, 1988), keep to themselves more during times of distress (Mikulincer & Florian, 1995), have more difficulty regulating gratification (Kobak & Sceery, 1988), and are less likely to invest in their relationships (Pistole, Clark, & Tubbs, 1995). Finally, Anxious-ambivalent individuals are more likely to seek extensive contact with their partners (Hindy & Schwarz, 1994), experience more sexual jealousy (Hindy & Schwarz, 1994), oblige their partners more during conflict (Pistole, 1989), appear more anxious (Kobak & Sceery, 1988), experience more mood swings (Hindy & Schwarz, 1994), invest more extensively in their relationships (Hindy & Schwarz, 1994), and be emotionally abusive (Dutton, Saunders, Starzomski, & Bartholomew, 1994).

Attachment styles tend to influence relational outcomes. Secure individuals tend to have relationships that are longer lasting (Feeney & Noller, 1990), more intimate (Senchak & Leonard, 1992), and more satisfying and rewarding (Keelan, Dion, & Dion, 1994; Kobak & Hazan, 1991; Pistole, 1989; Pistole, Clark, & Tubbs, 1995; Senchak & Leonard, 1992). Overall, Secure people tend to have more positive relational experiences and view their partners in a positive light (Pistole, 1993). In comparison, individuals with Avoidant attachment beliefs are less likely to experience intense love

(Feeney & Noller, 1990) or to be in love at all (Feeney & Noller, 1990, 1992), have shorter relationships (Feeney & Noller, 1992; Shaver & Hazan, 1987), and experience more relational adjustment problems (Hill, Young, & Nord, 1994). Avoidant individuals are also less likely to be upset or distressed when their relationships end (Feeney & Noller, 1992; Pistole, 1995) and generally feel more isolated and lonely than other people (Shaver & Hazan, 1987). Finally, Anxious-ambivalents are likely to fall in love quickly (Hill, Young, & Nord, 1994; Hindy & Schwarz, 1994), more often (Feeney & Noller, 1992), and more vocally (Hindy & Schwarz, 1994). However, Anxious-ambivalent individuals also tend to have problems maintaining relationships (Feeney & Noller, 1990; Shaver & Hazan, 1987) and experience more extreme emotional highs and lows (Hindy & Schwarz, 1994). When their relationships end, Anxious-ambivalent people tend to be the most surprised (Feeney & Noller, 1992) and negatively impacted by the termination of the relationship (Feeney & Noller, 1992; Hindy & Schwarz, 1994; Pistole, 1995).

In summary, attachment styles play a fundamental role in how people experience close relationships. Secure individuals hold a variety of positive expectations that manifest themselves in relational interactions and outcomes. By contrast, Anxious-ambivalent people, probably driven by their fear of being alone and disappointment that their partners do not live up to their idealized expectations, are more likely to engage in an extreme range of behaviors (i.e., from vocal expressions of love to verbally abusive outbursts), which ultimately lead to relational dissolution. Avoidant individuals, who have a difficult time trusting others, often engage in behaviors designed to keep others at a comfortable distance. Thus, attachment theory can provide a framework for understanding how people experience close relationships and interact with significant others. By exploring the relationship between attachment styles and parasocial interaction, we hope to contribute to our understanding of both phenomena. Specifically, we address the following research question: Are attachment styles related to the formation of parasocial relationships?

Method

Participants

A total of 115 undergraduate students (63 females, 52 males) at a large urban university completed a questionnaire during class time. Participants ranged in age from 17 to 48 years with a median age of 21 years. Based on their self-reported ethnic identity, 67 percent were Caucasian, 12.2 percent African-American, 8.7 percent Hispanic, 5.2 percent were Asian, and 6.9 percent did not report their ethnicity.

Questionnaire construction

The questionnaire included a parasocial interaction scale, two attachment style measures, and a set of demographic questions. The scale sequence was designed to prevent participants' awareness of their attachment style from influencing their responses to the parasocial scale items.

Table 1
Parasocial interaction scale items (adapted from Auter, 1992; Rubin, Perse, & Powell, 1985)

		Unidimensional factor loading
18.	I think my favorite TV personality is like an old friend.	.73
7.	My favorite TV personality makes me feel comfortable, as if I am with friends.	.73
13.	My favorite TV personality seems to understand the things I know.	.70
12.	If my favorite TV personality appeared on another television program, I would watch that program.	.67
10.	My favorite TV personality keeps me company when his or her program is on television.	.65
17.	I would like to meet my favorite TV personality in person.	.64
9.	I like hearing the voice of my favorite TV personality in my home.	.64
6.	I like to compare my ideas with what my favorite TV personality says.	.63
5.	When I'm watching the program my favorite TV personality is on, I feel as if I am part of the group.	.62
16.	I miss seeing my favorite TV personality when his or her program is not on.	.60
15.	If there were a story about my favorite TV personality in a newspaper or magazine, I would read it.	.55
20.	I am not as satisfied when other characters replace or overshadow my favorite TV personality.	.52
11.	I look forward to watching my favorite TV personality's show.	.45
3.	When my favorite TV personality shows me how he or she feels about some issue, it helps me make up my own mind about the issue.	.45
8.	I see my favorite TV personality as a natural, down-to-earth person.	.44
14.	I sometimes make remarks to my favorite TV personality during their program.[a]	.38
4.	I feel sorry for my favorite TV personality when he or she makes a mistake.[a]	.29
1.	The program my favorite TV personality is on shows me what the person is like.[a]	.28
19.	I find my favorite TV personality to be attractive.[a]	.28
2.	When my favorite TV personality jokes around with other people it makes the program they are on easier to watch.[a]	.24
Eigenvalue		5.97
Percentage of variance		29.83

[a] These items were eliminated during reliability screening. Overall scale reliability on the remaining 15 items was alpha = .87. The item numbers correspond to their use in prior research.

Parasocial interaction. Rubin et al.'s (1985) parasocial interaction scale assessed the participants' involvement with their 'favorite TV personality' (Auter, 1992). The initial scale consisted of 20 items and measured people's relationships with their local newscasters (Rubin, 1994). We reworded the items such that the phrases relating to 'newscasters' were replaced with the

phrases referring to a 'favorite TV personality'. This parasocial scale has been revised and adapted for use in many different media genres (i.e., soap opera, local TV news and home shopping; see Rubin, 1994, p. 274). The items on this scale were measured using a 5-point Likert scale where 1 represented *strongly disagree* and 5 represented *strongly agree* (see Table 1). We also included an open-ended question asking participants to identify their favorite TV personality.

Attachment styles. Two attachment style measures were included in the questionnaire. The first attachment style scale consisted of 15 items designed to

TABLE 2
Attachment style scale items (Feeney & Noller, 1992)

Items		Factor loadings of attachment scale items			Feeney & Noller's classification
		Factor 1 Anxious-ambivalent	Factor 2 Secure	Factor 3 Avoidant	
6.	I often worry that my partner won't want to stay with me.	**.80**	−.03	.14	Ambivalent
13.	I often worry that my partner doesn't really love me.	**.76**	.04	.20	Ambivalent
15.	I often don't worry about being abandoned.	**−.76**	.15	−.01	Secure
14.	I want to merge completely with another person.	**.59**	.03	−.18	Ambivalent
2.	Sometimes people are scared away by my wanting to be too close to them.	**.58**	.42	.32	Ambivalent
5.	I find that others are reluctant to get as close as I would like.	**.58**	−.03	.36	Ambivalent
9.	I find it relatively easy to get close to others.	−.19	**.74**	−.11	Secure
12.	I don't often worry about someone getting too close to me.	.03	**.71**	.11	Secure
8.	I am somewhat uncomfortable being close to others.	.13	**−.61**	.26	Avoidant
4.	I am nervous when anyone gets too close.	.16	**−.60**	.44	Avoidant
3.	Love partners often want me to be more intimate than I feel comfortable being.	−.16	**−.53**	.16	Avoidant
1.	I find it difficult to depend on others.	.15	−.03	**.81**	Avoidant
11.	I feel comfortable depending on other people.	−.02	.24	**−.78**	Secure
10.	I find it easy to trust others (reverse scoring).	.02	−.42	**.45**	Avoidant
7.	I feel comfortable having other people depend on me.*	−.21	.14	.01	Secure
Eigenvalue		3.71	2.61	1.27	
Percentage of variance		24.80	17.50	8.50	
Generalized reliability of factor scores		0.93	0.96	0.86	

* This item was eliminated during reliability screening. The item numbers correspond to their use in prior research.

demonstrate the extent to which people hold Avoidant, Anxious-ambivalent, and Secure beliefs (Feeney & Noller, 1992). The specific items used in this study (provided in Table 2) were administered using a 4-point forced choice Likert-scale where 1 represented *strongly disagree* and 4 represented *strongly agree*. The second attachment style measure adopted Hazan and Shaver's (1987) self-classification technique, which consists of three paragraph descriptions of the different attachment styles (i.e., Avoidant, Anxious-ambivalent, Secure) and their respective features. Participants must select the one description that best reflects their feelings about relationships. These two approaches were used in order to provide both interval- and nominal-level measures of attachment beliefs.

Demographic information. Finally, the questionnaire contained a standard set of demographic questions.

Procedure

Participants were asked during class time to fill out a questionnaire regarding their favorite TV personality. The participants were not informed of the attachment style portion of the survey until the parasocial scale had been completed. This procedure ensured that people's awareness of their attachment beliefs did not impact how they completed the parasocial scale. It took approximately 5–10 minutes to complete the entire questionnaire.

Results

Parasocial interaction scale reliabilities

In line with previous research, we conducted a principal components analysis on the 20-item parasocial interaction scale (see Rubin, 1994, p. 274). We specified that all 20 items would load on a single factor. The scree plot indicated that a single factor best represented the data, accounting for roughly 30 percent of the variance (eigenvalue = 5.97). However, five items were eliminated because their factor loadings were below .40. Conceptually, these items were poor indicators of parasocial involvement for our purposes. Items such as characters joking around, making mistakes, and revealing one's true identity were probably salient features of parasocial interaction in the original media situation (involvement with local newscasters), but not essential features for our context (involvement with favorite TV personalities). An item analysis (Spector, 1992) also supported the removal of these five items based upon an examination of the inter-item correlations and alpha-if-deleted statistics. The reliability of the remaining 15 items was satisfactory ($\alpha = .87$) and following standard practice the responses to these items were averaged for each participant (see Rubin, 1994). The mean parasocial interaction score for the sample was 3.27 on a 5-point scale (minimum = 1.8, maximum = 4.8). Most of the TV personalities identified were sitcom characters (67.6%), followed by characters on dramas (14.9%), famous movie stars (5.4%), animated personalities (5.4%), talk show hosts (4.1%), and late night TV entertainers (2.7%).

Attachment style scale reliabilities (factor scores)

Initial screening of the 15-item attachment style scale (Feeney & Noller, 1992) failed to produce reliable measures of attachment. The reliability of the five

items designed to measure Anxious-ambivalent attachment was marginally acceptable (α = .75), whereas the reliabilities of the items representing Avoidant (α =.65) and Secure (α =.50) attachment were clearly unacceptable. The removal of items from these scales did not dramatically increase their reliabilities. Consequently, we subjected the 15 attachment style items to a factor analysis using the principle component method with varimax rotation. The scree plot showed that a 3-factor solution best represented the data. Items whose factor loadings were above .40 were retained. As illustrated in Table 2, the results appear to be consistent with the intent behind the scale, extracting three dimensions of attachment: Anxious-ambivalent (eigenvalue = 3.71; percentage of variance = 24.80), Secure (eigenvalue = 2.61; percentage of variance = 17.50), and Avoidant (eigenvalue = 1.27; percentage of variance = 8.50). Although the factor loadings differ from Feeney and Noller's (1992) original conceptualization, we believe that the results can still be interpreted in light of an attachment perspective.

The first factor was interpreted to represent Anxious-ambivalent attachment. The items loading on this factor primarily consisted of the desire for intimacy and fear of being abandoned or not loved. All except one of the items loading on this factor are consistent with Feeney and Noller's (1992) conceptualization of Anxious-ambivalent attachment (see Table 2). Moreover, the single discrepancy that exists is the negative loading of a Secure attachment item. However, the negative loading of this item is consistent with Anxious-ambivalent attachment (i.e., worried about being abandoned). The second factor was interpreted to represent Secure attachment. The items loading on this factor all reflected comfort with intimacy and closeness. Again, the two highest loading items on this factor are consistent with Feeney and Noller's (1992) conceptualization of Secure attachment. Moreover, the discrepancies between our results and Feeney and Noller's (1992) classification of the remaining items loading on this factor can easily be interpreted in terms of Secure attachment. That is, while three of Feeney and Noller's (1992) Avoidant items loaded on our second factor, they negatively loaded on this factor and therefore represent comfort, not discomfort, with intimacy and closeness (see Table 2). Finally, the third factor was interpreted in terms of Avoidant attachment. The items loading on this factor represent a mistrust of others (see Table 2). Again, two of the three items loading on our Avoidant factor are consistent with Feeney and Noller's (1992) classification. Moreover, the single item at odds with Feeney and Noller's (1992) scheme can easily be interpreted as an Avoidant attachment when its negative loading is taken into account. Based on these results, factor scores were created representing the extent to which participants hold Anxious-ambivalent, Secure, and Avoidant attachment beliefs. It should be noted that four cases were dropped when creating the factor scores because of missing data. The generalized reliability method was used to calculate the reliability of the factor scores (see Kim & Mueller, 1978, p. 65). Acceptable levels of reliability were obtained for the Anxious-ambivalent (.93), Secure (.96), and Avoidant (.86) factor scores.

There are some discrepancies between Feeney and Noller's (1992) conceptual classification of the attachment items and our empirical results. These discrepancies may be explained by their negative factor loadings. While Feeney and Noller (1992) report dropping items from their scale, they do not report any other screening procedures. Our screening procedures produced three distinct attachment measures resulting in higher scale reliabilities than were obtained by Feeney and Noller (1992). Furthermore, we have obtained a very

similar factor structure using Feeney and Noller's (1992) items with another sample of participants (e.g., Cole & Leets, 1998).

Self-classified attachment styles

The second measure of attachment consisted of Hazan and Shaver's (1987) forced-choice paragraph descriptions of the Avoidant, Anxious-ambivalent, and Secure attachment styles. According to this self-classification technique, 66 people (57.4%) reported having a Secure attachment style, 28 (24.3%) reported an Avoidant style, and 21 (18.3%) reported holding Anxious-ambivalent beliefs. These self-classified frequencies are similar to previous findings using this measure (Baldwin et al., 1993; Feeney & Noller, 1992; Feeney, Noller, & Patty, 1993; Hazan & Shaver, 1987; Kobak & Sceery, 1988; Pistole, 1989).

Comparison of two attachment measures

The factor scores based on the Feeney and Noller (1992) scale were compared for equivalency across participants' self-classified attachment style (Hazan & Shaver, 1987). Three separate univariate analyses of variance were conducted comparing each of the three attachment factor scores across the three-level, self-classification measure of attachment (Hazan & Shaver, 1987). The results showed that the Anxious-ambivalent ($F(2, 108) = 32.36$, $p < .01$), Avoidant ($F(2, 108) = 5.98$, $p < .01$) and Secure ($F(2, 108) = 19.48$, $p < .01$) attachment factor scores varied significantly across individuals' self-identified attachment styles. As expected, post-hoc comparisons using Student–Newman–Keuls tests revealed that self-classified Anxious-ambivalents had higher Anxious-ambivalent (1.21) factor scores than did self-reported Secure (−.40) and Avoidant (.02) respondents ($p < .05$). Self-classified Avoiders had higher Avoidant (.52) factor scores than did self-reported Secure (−.24) and Anxious-ambivalent (.10) participants ($p < .05$). Finally, self-classified Secure individuals had higher factor scores on Secure (.22) attachment than did self-identified Avoidant (−.92) ($p < .05$) participants. However, Secure individuals were equivalent in terms of their secure factor scores to Anxious-ambivalent (.39) subjects. These findings are not surprising given that both Secure and Anxious-ambivalents are thought to be comfortable with intimacy and closeness. Overall, this cross-scale comparison indicates that the factor scores appear to be adequate measures of individuals' attachment beliefs: the dual attachment measures employed demonstrated adequate interscale consistency.

Sex differences

No sex differences were found in terms of parasocial interaction, attachment factor scores, or self-identified attachment styles. No interaction effects were found between sex and self-classified attachment style in terms of parasocial interaction.

Research question: Relationship among attachment styles and parasocial interaction

Several analyses examined the relationship between attachment styles and parasocial interaction. First, to explore differences in parasocial interaction among individuals with differing attachment styles, a univariate analysis of variance compared the parasocial interaction scores across the three-level, self-classification attachment measure (Hazan & Shaver, 1987). Parasocial interaction varied significantly across individuals' self-reported attachment

TABLE 3
Correlations between attachment belief factor scores and parasocial interaction within attachment style classifications

	Self-classified Attachment Style (Hazan & Shaver 1987)		
Attachment style factor scores (Feeney & Noller's 1992)	**Anxious-ambivalent**	**Secure**	**Avoidant**
Anxious-ambivalent factor score	−.13	−.01	−.09
Secure factor score	.21	.01	.01
Avoidant factor score	.14	.33*	.17

* $p < .01$.

styles ($F(2, 112] = 3.28$, $\eta^2 = .06$, $p < .05$). Post-hoc comparisons using Student–Newman–Keuls tests revealed that self-identified Anxious-ambivalents ($M = 3.59$) engaged in more parasocial interaction than did self-reported Avoidant ($M = 3.07$) individuals ($p < .05$). Secure individuals ($M = 3.26$) illustrated a moderate level of parasocial activity and did not vary significantly from the insecure groups.

To more fully explore the influence of attachment beliefs on parasocial behavior, we examined the variation in parasocial activity within each self-reported attachment group. To accomplish this task, the attachment factor scores derived from the Feeney and Noller (1992) instrument were correlated with the parasocial interaction scale within each self-reported attachment type. As the results in Table 3 indicate, within the Anxious-ambivalent group, variations in attachment beliefs were not related to parasocial interaction. Thus, while self-reported Anxious-ambivalents were more likely to engage in parasocial interaction than were Avoidants, there was little variation in parasocial activity within this group in light of their attachment beliefs. Self-classified Avoidant individuals produced a similar pattern. While the variation within this group was not related to their attachment beliefs, the variation in parasocial interaction for Securely attached individuals was related. Namely, Secure individuals with higher avoidant factor scores were more likely to engage in parasocial interaction ($r = .33$, $p < .01$). Consequently, although Secure individuals as a group engage in only a moderate level of parasocial interaction, secure individuals who mistrust others have higher levels of parasocial activity.

In sum, Anxious-ambivalents were the most likely to engage in parasocial interaction whereas Avoidant individuals were the least likely to do so. Secure individuals engaged only moderately in parasocial interaction. Even so, the more distrusting Secure individuals were, the more likely they were to form parasocial relationships.

Discussion

The purpose of this study was twofold. First, we explored the relationship between attachment styles and parasocial interaction. Second, we examined the generalizability of the attachment process to non-romantic relationships via a compensatory framework. Our results demonstrated that a person's willingness to form a parasocial bond with his or her favorite

TV personality is related to attachment beliefs. Specifically, we found that people with an Anxious-ambivalent style of attachment are the most likely to form a relationship with their favorite TV personalities. It is possible that the parasocial bonds these individuals form with media figures simply reflect another manifestation of their desire for intimacy, even if this intimacy is with a TV character. Along the same line, it is possible that Anxious-ambivalents turn to relatively stable TV characters as a means of satisfying their unrealistic and often unmet relational needs.

In addition, we found that Avoidant individuals are the least likely to form parasocial bonds. Their reluctance to form strong bonds with TV personalities most likely reflects these individuals' hesitancy to form actual relationships. Apparently these individuals not only avoid relational intimacy but imagined intimacy as well. Secure individuals engaged in a moderate level of parasocial interaction with more distrusting individuals forming stronger bonds with their favorite TV character. Perhaps TV characters play a compensatory role in the lives of these secure individuals who may be having a difficult time trusting a relational partner. Research indicates that secure people are likely to turn to others in times of need (Florian, Mikulincer, & Buchholtz 1995). It is possible that this subset of Secure individuals' increased reliance on TV characters illustrates another example of this coping behavior. It is not hard to imagine how people who generally feel secure and trust others may seek some comfort in dependable and predictable TV personalities as problems arise. It is interesting to note that while Secure individuals may turn to parasocial interaction when relational distrust arises, Avoidant individuals do not. Perhaps Avoidant individuals have concluded that no one can be trusted, including TV characters. Overall, our findings coincide with Horton and Wohl's (1956) deficiency paradigm, recently examined by Tsao (1996) in terms of personality characteristics. That is, Anxious-ambivalents and a subset of Secure individuals may turn to parasocial bonds as a result of unfulfilled relational needs. Shortly after our study was originally submitted, Cohen (1997) published a study exploring the influence of sex and attachment styles on parasocial interaction. Using different categories of attachment (close, depend, anxiety), Cohen (1997) found that anxious men and non-avoidant women (depend) engaged in parasocial interaction. Although there are some differences between our results and Cohen's findings, both studies suggest that parasocial interaction plays a compensatory role in the lives of anxiously attached individuals. We believe that our study and Cohen's provide initial insights regarding how attachment styles influence alternative strategies that people employ when attempting to satisfy their relational needs.

Our research also contributes to our understanding of attachment theory's theoretical scope. There is currently some debate regarding the extent to which attachment processes influence everyday interactions (for a review, see Tidwell, Reis, & Shaver, 1996). Our findings suggest that attachment processes hold relational implications for non-romantic relationships. Consequently, this study contributes to the growing body of research suggesting that attachment processes are important in non-intimate contexts

(e.g., Hardy & Barkham, 1994; Kirkpatrick & Shaver, 1992). While it is likely that attachment processes play a more fundamental role in romantic relationships, our findings raise interesting questions regarding the extent to which attachment processes may influence our social lives.

Finally, our research has implications for the study of attachment processes in general. By employing two complementary measures (interval and nominal) of attachment, we were able to identify between-group differences and explore within-group variation. Consequently, our findings lend credence to the growing practice of using multiple measures when exploring the intricate relationships that attachment processes may produce. Similarly, Bartholomew (1990) has proposed an alternative four-category model of attachment that distinguishes Avoidant attachment into two distinct categories (Dismissing and Fearful attachment). We suspect that the use of this conceptual category scheme would have resulted in very similar findings (namely that Preoccupied individuals would engage in more parasocial interaction than Dismissing or Fearful individuals).

In conclusion, we hope that our research generates more interest in how attachment theory may be useful for understanding relational outcomes across a variety of relational settings. We believe that exploring attachment processes by using multiple methods will further contribute to our knowledge regarding people's social lives and relational interactions.

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