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Committed to Oprah, Homer, or House:
Using the Investment Model to Understand Parasocial Relationships

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Abstract

People can develop close relationships with media figures viewed on television. Across two studies we examined the extent to which satisfaction with, alternatives to, and investments in such parasocial relationships (PSR) account for feelings of commitment toward favored television characters. In Study 1, satisfaction and investments positively predicted commitment to fictional television characters while the alternative of not following any television character negatively predicted commitment to the PSR. In Study 2, we tested the bases of the investment model as predictors of commitment to fictional (e.g., Homer Simpson) versus non-fictional (e.g., Oprah Winfrey) television characters. As in Study 1, for both fictional and non-fictional characters, commitment level was significantly predicted by levels of satisfaction and investments. However, the alternative of not following any character was significantly associated with commitment only for fictional characters. Results support the use of the investment model to understand processes underlying PSRs.

Keywords: parasocial relationships, interdependence, romantic relationships

Committed to Oprah, Homer, or House:

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On average, teenagers and adults spend three hours per day watching television, adding up to over one thousand hours of television viewing per year (Bureau of Labor Statistics, 2010). Add to that the use of online networking to follow celebrities and favorite media figures outside of television viewing and it is easy to see how individuals could feel as if they were maintaining relationships with media figures. Although such parasocial relationships have been the subject of scholarly inquiry for some time, relatively little is known about the psychological constructs underlying the development and maintenance of them.

Since first noted in 1956, the concept of parasocial relationships (PSRs) has been well established in the media and communication literature. In their initial work on parasocial interaction, Horton and Wohl (1956) tasked social psychologists with learning how PSRs are integrated into the matrix of everyday social life. Although empirical investigation of PSRs in the field of psychology has been slow, there has been growing interest over the past decade (e.g., Derrick, Gabriel, & Tippin, 2008; Gardner & Knowles, 2008). As PSRs become better understood in relation to interpersonal relationships, comparison between the two would benefit from improved measurement of PSRs that more precisely operationalizes the strength of such relationships, captures the psychological processes underlying the development and maintenance of these type of relationships, and allows for prediction of both traditional (e.g., television viewing habits) and nontraditional (e.g., benefits to self-esteem) outcomes associated with PSRs. In approaching this task from a social psychological perspective, the current research adopted an investment model approach to help understand PSRs (Rusbult, Agnew, & Arriaga, 2012), focusing on the concept of commitment.

Parasocial Relationships

PSRs are one-sided relationships that people establish with media personae that are most commonly described in terms of parasocial interaction. These relationships involve a realistic feeling of face-to-face contact between media characters and viewers (Horton & Wohl, 1956). Parasocial interaction has also been regarded as a user response to a media figure as if they are a personal acquaintance that is both behavioral (e.g., speaking to a media figure on television audibly) and cognitive (e.g., making inferences about the figure's behavior; Giles, 2002). A typical parasocial interaction is characterized by feeling a connection with a character that a viewer is then motivated to maintain using increasingly complex evaluative schemas (Reeves & Greenberg, 1977; Reeves & Lometti, 1979). Although parasocial interaction is momentary, referring to a single interaction with a character, parasocial interactions are an antecedent to the development of a long-term PSR (Rosengren & Windahl, 1972).

A PSR may develop as a viewer continues to interact with a media figure and the nature of the interaction shifts from one characterized by momentary encounters to one of a lasting relationship. By watching a character across time and in multiple mediums, a sense of intimacy may develop out of a sense of shared experiences and interactions (Nordlund, 1978; Derrick, Gabriel, & Hugenberg, 2009). In this situation, the viewer may believe he or she has an intimate knowledge of the media figure with which he or she can predict, and make attributions for, the character's behavior. Repeated exposure provides an opportunity for these relationships to grow in importance and for a viewer to show increasingly greater commitment to a character (Rubin & McHugh, 1987; Swanson, 1987).

Over the past 50 years, research on PSRs has most commonly been conducted to measure the success of various broadcasting techniques or to predict television viewing (Giles, 2002).

Recent work in the field of psychology, however, suggests that PSRs may be similar to interpersonal relationships in terms of cognitive representations, long-term investments, and psychological benefits. The presence of PSR partners has been shown to counteract rejection from a “real” interpersonal relationship by negating the mood and esteem effects of social rejection (Derrick et al., 2009) and reducing impairments on cognitive tasks typically caused by exclusion (Knowles, 2007). Additionally, people often respond to their PSR partners similarly to how they respond to a real close other. For example, individuals primed with their favorite character demonstrate a desire to disclose and report greater empathy (Knowles, 2007). Furthermore, people with strong attachments to their favorite characters demonstrate social facilitation effects in the presence of the character (Gardner & Knowles, 2007). Finally, the effects of PSRs mirror those of real interpersonal relationships in terms of their ability to provide self-enhancing benefits to the individual involved: Individuals with low self-esteem report developing PSRs with figures they view as close to their own ideal selves and report feeling similar to their ideal self after thinking about that media figure (Derrick et al., 2008).

Despite similarities between PSRs and interpersonal relationships, there are some notable differences. In a PSR, the communication is mediated, the interaction is only one-way, and there is no mutual interdependence. Additionally, PSRs are not defined by expectations of exclusivity. Unlike romantic relationships, individuals can have multiple simultaneous PSRs and often their interest in a media figure is shared with friends or family. These differences should influence the way some processes unfold in PSRs compared to interpersonal relationships. Nevertheless, research has shown that similar processes appear to underlie both interpersonal relationships and PSRs (Perse & Rubin, 1989). In an attempt to gain a greater understanding of the processes

underlying commitment within PSRs, we turned to a model traditionally employed in the domain of interpersonal relationships.

The Investment Model of Commitment Processes

The Investment Model of Commitment Processes (Rusbult, 1983) focuses on the construct of psychological commitment, characterized by an intention to remain in a relationship, attachment to a partner, and a long-term orientation toward the partnership (Arriaga & Agnew, 2001). According to the investment model, an individual's level of commitment to a current relationship is influenced by three independent factors: (1) the amount of satisfaction experienced from the relationship, (2) the quality of the available alternatives to that relationship, and (3) the amount of investment in the relationship. Satisfaction is a function of the outcomes a partner gains from a relationship compared to personal expectation of what is acceptable. If outcomes are equal to or greater than expectations, a person will be relatively satisfied in the relationship. Alternatives to a relationship may include other people, other relationships, or having no relationship at all. Commitment to a relationship will be decreased if an individual perceives that better outcomes are available from an attractive alternative. Finally, the size of one's investments in a relationship can strengthen commitment. Investments can be both tangible (e.g., material possessions, money, friends) and intangible (e.g., time, identity, future plans) resources attached to a partnership that would be lost if the relationship were to end (Goodfriend & Agnew, 2008). Greater commitment to a relationship results from greater satisfaction, fewer alternatives, and more investment in the relationship (Rusbult, Agnew, & Arriaga, 2012; Rusbult, Martz, & Agnew, 1998). Together, satisfaction, alternatives, and investments combine to explain approximately 60% of the variance in commitment to interpersonal relationships (Le

& Agnew, 2003). Commitment, in turn, has been found to be one of the strongest predictors of stay-leave behavior in relationships (Le, Smoak, Agnew, Korn, & Mutso, 2010).

Applying the Investment Model to Parasocial Relationships

We view the investment model as applicable to understanding PSRs for a number of reasons. First, the model has demonstrated reliable consistency in predicting commitment across both interpersonal and non-relational domains. PSRs may lack key defining qualities of an interpersonal relationship while also exhibiting some processes similar to one. In both interpersonal relationships (e.g., romantic relationships, friendships) as well as in a diverse range of non-relational contexts, including commitment to jobs, teams, schools, hobbies, medical regimens, and even international policies, the model has been found to explain a significant portion of variance (see Le & Agnew, 2003; Rusbult, Agnew, & Arriaga, 2012). Because PSRs might be viewed as straddling a line between interpersonal and non-relational, it is beneficial to take an approach that has been validated in both domains.

Second, the investment model provides a distinct operationalization of the strength of a PSR in terms of psychological commitment. Extant research supports that the components of commitment (e.g., long-term orientation) are evident in behaviors related to PSRs, including long-term orientation and intent to persist in watching a character for as long as possible (Hoffner, 1996) as well as attachment to a media figure characterized by a sense of companionship within the relationship (Nordlund, 1978; Rosengren & Windahl, 1972) and feelings of distress when separated from the character (Cohen, 2004). Consistent with past research employing the investment model, an individual's satisfaction with, alternatives to, and investments in a target should influence how committed the individual feels to that target. Although PSRs differ in some ways from interpersonal relationships, it is reasonable to expect

that a viewer's commitment to a media figure will be similarly influenced by their satisfaction with, investment in, and alternatives to that PSR.

Satisfaction resulting from watching a media figure should influence commitment to continuing to watch that character, just as satisfaction with a relationship partner influences commitment to that partner. Satisfaction is a function of the outcomes an individual gains from a relationship (e.g., entertainment, companionship) compared to their personal expectation of what is acceptable in such domains (i.e., their comparison level; Thibaut & Kelly, 1959). If their current outcomes are equal to or greater than their expectations, they will be relatively satisfied with the PSR. Thus, the greater satisfaction an individual feels with regard to watching a media figure, the more committed he or she should be to continuing to follow the character.

Perceived alternatives to watching a media figure should also influence commitment to that figure. Rusbult and colleagues (1998) operationalized alternatives as having a relationship with a different partner, having no relationship (being alone), or spending time with friends/family. Alternatives to a PSR can be similarly conceptualized including having a PSR with a different character (e.g., watching other characters), having no relationship at all (e.g., choosing not to watch any characters), or spending time engaging in other activities (e.g., spending time with friends/family). While collectively these types of alternatives have been shown to negatively predict commitment to an interpersonal relationship (Rusbult et al., 1998), it is plausible that certain alternative types might be more applicable than others in influencing commitment to PSRs.

In predicting commitment, quality of alternatives has been shown to be less important in relationships that are not defined by expectations of exclusivity than in those that are (e.g., Branje, Frijns, Finkenauer, Engels, & Meeus, 2007). Because individuals can have multiple

simultaneous PSRs (after all, even rabid fans of Oprah may also be rabid fans of Homer), it is unlikely that simply viewing other characters will significantly decrease commitment to a given media figure. Moreover, whereas in a romantic relationship time spent with friends and family may detract from time spent with a romantic partner, watching a favorite media figure may be an activity that is shared with friends or family. In fact, close interpersonal relationships may be strengthened by shared affection for a favorite media figure. Because choosing not to follow any characters (the equivalent of being alone) is the only alternative that does not allow for continued viewing of a favorite character, it is most likely to negatively predict commitment to a PSR.

Finally, the investment model suggests that perceived tangible and intangible investments in a PSR should be positively associated with commitment to that PSR. In the case of a PSR, tangible investments may include the purchase of DVDs or other products associated with the favorite character. Intangible investments may include the time spent on watching the media figure. Investments are considered "sunken costs" in that if a relationship is to end, the investment will be damaged or lost. For that reason, if an individual perceives that he or she is highly invested in a PSR, he or she should be more committed to that PSR.

Fictional versus Non-Fictional PSR Partners

Depending on the type of television figure (i.e., fictional or non-fictional), characteristics of a PSR may differ fundamentally. Past researchers have stressed the importance of assessing different types of media figures when measuring the strength and outcomes of PSRs (Cohen, 2003; Giles, 2002). Previous work examining PSRs among adult viewers has demonstrated differences between types of characters specifically in regard to relational processes such as dissolution. Cohen (2009) found that viewers feared breakup from fictional characters more than from non-fictional characters, even though their relationships with fictional characters were not

stronger than those they develop with real characters. Relationship dissolution is strongly related to commitment, thus it is reasonable to assume that there may be differences in how commitment processes operate between character types.

Commitment may be influenced by the type of media figure with which one has a PSR. Specifically, differences in accessibility between fictional and non-fictional characters may influence both the degree to which a viewer can invest in a PSR and the quality of alternatives to a PSR. Fictional characters are unlikely to engage media users beyond a given viewing episode and offer no possibility of actual interaction. In contrast, non-fictional media figures appear across a variety of media outlets and offer at least a remote possibility of meeting in reality and engaging in intentional face-to-face interaction. Individuals can invest in a PSR with a non-fictional character by watching them on additional programs, following them online, reading about them in magazines, or even attending events in which they take part (e.g., a book signing). In turn, the ability to follow a non-fictional target in multiple mediums may decrease the significance of an alternative that limits general television viewing. Compared to a non-fictional character, investment in a fictional character is typically limited to viewing the program on which the character appears. This may include repeated viewing of the show on DVD or through programs that allow access to previous episodes (i.e., Hulu or Netflix), however it still requires viewing the program. Thus, an alternative that limits television viewing essentially serves to end the relationship. In accord with previous suggestions that character type should be considered when studying PSRs we explored the role of satisfaction level, investments, and alternatives in commitment across character types with the expectation that the base most likely to differ by character would be alternatives.

Overview of the Current Studies

We hypothesized that commitment to a PSR should be highest when satisfaction and investments are high and alternatives (particularly the alternative of following no characters at all) are low. In two studies we assessed the applicability of the investment model's constructs in predicting levels of commitment to individuals' favorite media figures. When asked to describe a favorite television character, past research has shown that research participants tend to self-select a fictional character (e.g., Charlie Harper from "Two and a Half Men") as opposed to a non-fictional one (e.g., John Stewart; Cole & Leets, 1999). As we wished to both (1) allow participants to select and describe their own personal favorite character and (2) make comparisons between PSRs involving fictional and non-fictional characters with reasonably and approximately equivalent-sized groups, we collected data from a single large sample of young adults ($N = 460$) and randomly divided the sample of participants who chose a fictional favorite character ($N = 370$) between two studies. The random samples were generated using the random number generator function in IBM SPSS Statistics Software v.17. To ensure approximately equivalent samples sizes of fictional and non-fictional characters in Study 2, a sample of 110 fictional characters was randomly generated and assigned to Study 2. The remaining participants were assigned to Study 1. In Study 1, we examined whether the bases of the investment model independently and collectively predicted levels of commitment to a fictional television character. In Study 2, we replicated results of Study 1 and explored whether the type of character serving as the target of the PSR (i.e., fictional or non-fictional) moderated any of the direct effects between the bases of the investment model and commitment.

Study 1

Method

Participants. Participants were undergraduate students from a large Midwestern university. As described above, the total sample of fictional characters ($N = 370$) was randomly divided between Study 1 and Study 2. Two hundred and sixty students who identified a fictional character were included in Study 1. One participant was under age 18 so analyses are reported based on a final sample size of two hundred and fifty nine (117 men, 141 women). Participants' ages ranged from 18 to 26 years ($M = 19.79$, $SD = 1.52$), and the majority indicated they were White (84.6%), with 9.7% Asian, 2.3% Black, and 1.5% Hispanic. All participants completed the measures described below either in partial fulfillment of an introductory psychology course requirement ($N = 99$) or in exchange for extra credit in a communication course ($N = 160$). To ensure the participants from the psychology participant pool did not differ from those from the communication pool, we ran t-tests to compare all study measures. The two samples did not significantly differ on any study variables.

Procedure. Participants signed up to complete the online study through a subject pool website and were then immediately given a link to the survey website. After providing consent, participants were told to choose their favorite television character or persona. Participants were instructed that this could be someone from a talk show or news program (e.g., Oprah Winfrey) or someone from a comedy or drama program (e.g., Rachel Green from *Friends*). The most frequently chosen characters were House from *House, M.D.* (5.8%) and Michael Scott from *The Office* (5.4%). Participants then completed the measures described below with this character in mind, were debriefed, and thanked for their time.

Measures. To assess relational dynamics, items from the Investment Model Scale (Rusbult et al., 1998) were reviewed for their applicability in assessing participants' relationships with their favorite television characters¹. Specifically, participants completed six items assessing commitment (e.g., "I want to be able to watch this character for a very long time"), four items assessing satisfaction (e.g., "I feel satisfied while watching this character"), and four items assessing investments (e.g., "I have invested a great deal of time and energy into following this character that I would lose if I could not watch him/her any longer"). Additionally, participants completed seven items to measure alternatives following recommendations to be specific with regard to this construct (see Agnew et al., 2008). Of these, three items assessed participants' perceptions of following other characters as an alternative (e.g., "My alternatives to following this character, such as watching a different character, are close to ideal"; referred to as Alternative: Other characters), two items assessed participants' perceptions of spending time with friends as an alternative (e.g., "I sometimes think I would prefer to spend time with friends rather than watching this character"; referred to as Alternative: Friends) and two items assessed participants' perceptions of not watching any television characters as an alternative (e.g., "At times I think that I would prefer not to follow any television characters"; referred to as Alternative: No characters).

Finally, we collected two variables to control for participants' viewing habits. Participants were asked to rate how frequently they watched the show in which their favorite character appears using a four-point response scale (1 = "I have watched the show 1-2 times" (4.6%), 2 = "I have watched the show 3-5 times" (11.1%), 3 = "I watch the show once a week" (67%), 4 = "I watch the show once or more per day" (17.2%)) and for how long they had watched the program using a four-point scale (1 = "6 months or less" (9.2%), 2 = "6 months to 1

year” (10.7%), 3 = “1-3 years” (50.2%), 4 = “4+ years” (29.9%). See Table 1 for descriptive information on all Study 1 variables.

Results and Discussion

Descriptive analyses of study measures. Table 1 presents descriptive statistics and correlations between the investment model variables including satisfaction and investments as well as the three relationship alternatives, and frequency and duration of viewing. As shown in the table, all bivariate correlations among the investment model variables were significant, with the exception of alternatives: other characters and alternatives: no characters. As expected, commitment was positively correlated with satisfaction and investments, and negatively correlated with each of the three alternatives to the relationship.

Hypotheses Testing. Hierarchical multiple regression analyses were conducted to predict commitment level to PSRs. The two control variables were entered at Step 1 and accounted for only a small percentage of the variance in commitment ($R^2 = .042$). Duration of viewing was a significant predictor of commitment level ($\beta = .18, p < .001$).

Satisfaction, investments, and the three alternatives measures were added to the control variables in Step 2. The overall amount of variance accounted for by this model significantly increased from Step 1 ($R^2 = .380$; Step 1 to Step 2 R^2 incremental increase = $.338, p < .001$). Satisfaction level ($\beta = .26, p < .001$) and investments ($\beta = .37, p < .001$) both positively predicted commitment level. Of the three alternatives measures, only Alternatives: no characters was significantly associated with commitment level ($\beta = -.26, p < .001$). See Table 2 for complete regression results.

Study 2

The pattern of results found in Study 1 supports the idea that commitment to a PSR is highest when satisfaction and investments are high, and alternatives are low. Among the alternative measures, alternatives: no characters was the only significant predictor of commitment. This was expected as, unlike romantic relationships, PSRs are not defined by an expectation of exclusivity and are often shared with (rather than in competition with) friends.

Although the results from Study 1 were encouraging, they speak to PSRs in which the target was a fictional character. As mentioned previously, characteristics of a PSR may differ depending on the type of media figure involved (Cohen, 2003; Giles, 2002). In Study 2 we wished to replicate the results of Study 1 using both fictional and non-fictional characters and to explore the structure of commitment to identify any potential divergence in the bases of commitment between character types.

Method

Participants. Two hundred undergraduate students from a large Midwestern university participated. Four participants were under age 18 and thus not able to give consent so their data was removed. Reported analyses are based on a final sample of one hundred and ninety six participants (83 men, 113 women). Participants' ages ranged from 18 to 24 years ($M = 19.75$, $SD = 1.34$), and the majority indicated they were White (81.6%), with 10.7% Asian, 3.6% Hispanic and 2.6% Black.

All participants completed the measures described below either in partial fulfillment of an introductory psychology course requirement ($N = 65$) or in exchange for extra credit in a communication course ($N = 131$). As in Study 1, we compared responses to all study variables

across the two participant pools and found that the pools did not differ significantly on any variables of interest to this study.

Procedure and measures. Participants signed up to complete the online study through a participant pool website and were then immediately given a link to the survey website. After providing consent, participants received the same instructions as in Study 1 telling them to indicate their favorite television character or persona. Previous research has shown that when participants are asked to identify a favorite television character, the majority of characters identified are fictional (Cohen, 1997). Whereas in Study 1 the sample was restricted to participants who chose fictional characters, in Study 2 participants included those who nominated both fictional (54.1%; $N = 106$) and non-fictional (45.9%; $N = 90$) television personas. The most frequently chosen non-fictional personas were Lauren Conrad from *The Hills* (4.6%) and Ellen DeGeneres from *The Ellen DeGeneres Show* (4.1%). The most frequently chosen fictional characters included Blair Waldorf from *Gossip Girl* (3.1%) and House from *House, M.D.* (3.1%). Participants then completed measures identical to those collected in Study 1 with this character in mind, were debriefed, and thanked for their time. As in Study 1, the majority of participants reported watching the show on which their favorite character appeared at least once per day (83.3%) and for at least one year (70.1%; of those, 25.9% reported watching the show for 4 or more years). See Table 3 for complete descriptive information about Study 2 variables.

Results and Discussion

Descriptive analyses of study measures. Means and standard deviations for the investment model variables for both fictional and non-fictional characters are presented in Table 3. Overall commitment was higher for fictional ($M = 4.34$, $SD = 1.50$) than non-fictional ($M =$

3.67, $SD = 1.29$) characters, $t(195) = 3.56, p < .001$. Investments were higher for fictional ($M = 2.42, SD = 1.72$) than non-fictional ($M = 1.70, SD = 1.69$) characters, $t(195) = 2.95, p < .01$. Participants reported greater alternatives to non-fictional than fictional characters in terms of both friends ($M = 6.51$ and 5.68 , respectively; $t(195) = -2.97, p < .01$) and no characters ($M = 4.27$ and 3.20 , respectively; $t(195) = -.357, p < .001$). See Table 4 for the results of bivariate correlations among all study variables.

Testing hypotheses. To demonstrate the utility of using the investment model variables to predict commitment level for fictional and non-fictional characters we conducted moderated regression analyses (Aiken & West, 1991). The two control variables (frequency and duration of viewing) were entered at Step 1. At Step 2 we tested the independent effect of character type (0 = fictional, 1 = non-fictional) and each of the bases of commitment. Finally, to examine whether the strength of the associations between any of the bases and commitment differed between character type, we entered all two-way interactions between character type and the bases at Step 3. See Table 5 for a summary of these analyses.

The control variables at Step 1 accounted for only a small percentage of the variance in commitment ($R^2 = .100$). Both frequency of viewing ($\beta = .24, p < .001$) and duration of viewing were significant predictors of commitment level ($\beta = .18, p < .01$). Consistent with hypotheses, the overall amount of variance accounted for by the model in Step 2 was considerable ($R^2 = .442$) and was significantly greater than the model containing only the control variables (Step 1 to Step 2 R^2 incremental increase = $.343, p < .001$). Character type ($\beta = -.14, p < .05$), satisfaction level ($\beta = .30, p < .001$), and investments ($\beta = .28, p < .001$) were significantly associated with commitment. As in Study 1, of the three alternatives measures, only Alternatives: no characters was significantly associated with commitment level ($\beta = -.23, p < .001$).

At Step 3, only the association between Alternatives: no characters and commitment was marginally significantly moderated by character type ($\beta = 0.15$, $t(180) = 1.80$, $p = .07$). To probe this interaction, we tested the simple slopes of Alternatives: no characters at one standard deviation above and one standard deviation below the mean using procedures recommended by Aiken and West (1991) and elaborated by Preacher and colleagues (2006) and Hayes (2012). Results revealed that the association between Alternatives: no characters and commitment was not significantly different from zero for non-fictional characters ($b = -.070(.066)$, $t = -1.05$, $p = .30$). The simple slope for fictional characters, however, did significantly differ from zero ($b = -.225(.058)$, $t = -3.89$, $p < .001$).

Discussion

The current work is the first to measure psychological commitment to a PSR. Results from two studies provide good support for the value of applying the investment model to understand commitments formed with favorite television persona, including both fictional and non-fictional characters. Consistent with previous work, we hypothesized that commitment to a PSR would be associated with higher satisfaction, greater investment, and poorer quality alternatives. Because of the unique qualities of a PSR (i.e., lack of expectations of exclusivity and ability to serve as a shared interest with real others), we hypothesized that only an alternative that required a viewer to cease watching a favorite television persona would be related to commitment. Consistent with hypotheses, across two samples satisfaction level and investments were significantly and positively associated with commitment to both fictional and non-fictional characters. Of the three types of alternatives considered, alternatives: no characters was significantly associated with commitment for fictional characters only.

Previous research has demonstrated that characteristics of PSRs differ depending upon the type of character serving as the target of the relationship (Cohen, 1997; Cohen, 2009). In the current study we explored whether the associations between the traditional bases of the investment model and commitment were moderated by character type. Consistent with hypotheses, only quality of alternatives (specifically choosing not to follow any characters) afforded differential prediction of commitment between fictional and non-fictional characters. Choosing not to watch any characters was negatively related to commitment for fictional characters only. It is possible that because non-fictional characters are accessible through a number of mediums outside of television and even offer the possibility of future face-to-face interaction, the prospect of not watching television does not necessarily indicate an end to the relationship. For fictional characters, however, ceasing to watch television serves to essentially end the relationship. Not following any characters was meant to be equivalent to the alternative of being single (i.e., dissolving the relationship) in the traditional Investment Model Scale. For individuals who chose non-fictional targets, however, choosing not to follow any characters does not necessarily imply relationship dissolution. Viewers are able to follow a non-fictional media figure across a variety of mediums and they may also maintain the relationship through expectations of future face-to-face interaction. It is only for those who chose a fictional character that not following any characters necessitates complete dissolution of the relationship.

Results of the current study support the notion that a greater understanding of PSRs can be achieved using theory and measurement from the study of interpersonal relationships. It has become increasingly clear that PSR partners are not dissimilar to real relationship partners. As attachment to a character increases, he/she becomes more like an interpersonal social target (Gardner & Knowles, 2008) and in response to relational threat in PSRs, individuals enact

relational maintenance mechanisms expected in interpersonal relationships (Sandersen, 2009). It is reasonable to expect, then, that the experience of commitment to a PSR is not dissimilar to that of commitment to an interpersonal relationship. Applying the investment model offers a direct and reliable method of measuring commitment to a PSR and the factors underlying that commitment. Perhaps more importantly, measuring commitment to a PSR using the Investment Model Scale (Rusbult et al., 1998) provides insight into the similarities and differences between commitment to PSRs and commitment to interpersonal relationships.

The social zeitgeist often inspires research and theory in social psychology (Reis, 2010, p. 25). Today's zeitgeist is one defined by technological advancement and consumption, even in regard to interpersonal relationships. The average American spends 20% of their day watching television and an additional 32 hours per month online. Additionally, *social* media is the number one online destination (Nielsen, 2010). Just as technology is changing the landscape of interpersonal interaction, it may also be redefining PSRs. Parasocial interaction that was once restricted to limited television or radio exposure now seems to be virtually without bounds. Individuals can engage with their favorite media figures at almost any time and across a variety of domains. Exposure to a media figure's intimate thoughts, feelings, and behaviors through mediums like Twitter, Facebook, and fan pages likely allows for an increased sense of shared experiences and closeness. As this changing landscape increases the prevalence and depth of contact with parasocial figures, the amount of need fulfillment these figures can provide (as well as the centrality of these figures in people's lives) is likely to continue to increase. As such, achieving a greater understanding of what makes these relationships strong and fulfilling for individuals may shed important insight into processes known to be impacted by interpersonal

relationships, including life satisfaction (Baumeister & Leary, 1995), positive affect (Le & Agnew, 2001), and even mental and physical health (Kiecolt-Glaser & Newton, 2001).

There are several notable strengths of the current work. First, application of the investment model to PSRs is novel and provides an extension of an existing theory to a new domain of targets. The model has reliably predicted commitment across both interpersonal and non-relational domains but PSRs represent a unique application because they appear to straddle a line between being interpersonal or non-relational in nature. In addition we have made distinctions within the domain of PSRs between fictional and non-fictional targets. This distinction recognizes that like interpersonal relationships, PSRs are complex and may be characterized by different processes and outcomes depending on the individual and target involved. And finally, the current research explicitly acknowledges that the increasing availability and general adoption of technology in the past decades has created new kinds of relationships to consider which feature both points of commonality (e.g., companionship, similarity) and difference (e.g., lack of interdependence, fully mediated interaction) with traditional interpersonal relationships. Not only do the current findings help us to understand commitments to media figures, but they also help us to refine those features of human relationships that are at least somewhat unique (e.g., expectations of exclusivity).

As with any study, there are some limitations that should be noted regarding this research. The current work is limited to PSRs focused on television characters. While television characters have been a common focus of research on PSRs, they by no means represent the totality of possible PSR targets. Radio and internet personalities, musicians, literary characters, gaming characters and website personae represent potential targets (e.g., Sandersen, 2009). The current research demonstrated that at least one factor underlying commitment to a PSR differed

depending on whether the target was fictional or non-fictional. It is possible that the characteristics of a PSR may also differ between televised and non-televised media figures. Future work should consider commitment to a broader range of targets.

The conclusions of this research must be set within its limitations. Due to the correlational nature of the study one cannot make causal claims about the findings. We believe that differentiating between fictional and non-fictional characters is a key strength of this research, however, we recognize that the conceptual distinction between fictional and non-fictional characters is likely to be complex. We suggest that a potential explanation for the findings regarding alternatives to fictional and non-fictional targets is that recent developments such as Twitter and Facebook offer a medium in which to continue a relationship with a non-fictional character more so than a fictional one. Research has examined the role of accessibility to non-fictional media figures such as athletes, musicians, and reality TV stars via social networking sites such as Twitter, Facebook, and fan community websites (e.g., Kassing & Sanderson, 2010) however research examining the role of these mediums in PSRs with fictional characters is limited. Research acknowledges that access to media figures through social networking is redefining the parasocial relationship for both types of characters (Stever, 2009). It is possible that the effect of various alternatives to a PSR may depend on the degree to which an individual interacts with the PSR target across domains, regardless of the type of target. Future work should differentiate between fans that interact with targets of a PSR across these domains from those who do not and examine the role that that more involved interaction plays in perceptions of various alternatives to the relationship.

A second potential explanation for the findings regarding alternatives to fictional and non-fictional targets may be rooted in the prospect of future interaction with a non-fictional

target. Regardless of whether a non-fictional target is followed across multiple mediums, a viewer may not perceive not watching the character as an end to the relationship because there is always the potential to meet the media figure in real life (an option not available to those who follow fictional characters). The current research does not allow for a precise examination of the underlying mechanism accounting for the relationship between alternatives and commitment to non-fictional characters (i.e., the ability to follow non-fictional targets across multiple mediums or the prospect of future interaction), but this may be an important distinction for future research to consider.

In addition, the current sample is limited to college students. Important questions remain about the generalizability of the results. There is reason to expect that age may influence commitment to a PSR. Cohen (2003) found that age influenced the reported intensity of a parasocial breakup. In regard to interpersonal romantic relationships, commitment is strongly associated with the severity of distress following dissolution (Sprecher, Felmlee, Metts, Fehr, & Vanni, 1998). Because commitment is associated with distress following an interpersonal breakup, and age is related to experienced distress following a parasocial breakup, it is possible that age may also relate to commitment to a PSR.

Overall, these studies provide strong support for the adoption of the investment model approach to understanding PSRs. An individual's commitment to a media figure can be viewed as a function of the degree of satisfaction with the relationship, the magnitude of their investment in the relationship, and the availability of quality alternatives to the relationship. Additionally, this research contributes to the understanding of PSRs as psychological phenomena. It operationalizes the strength of PSRs in terms of commitment as seen in interpersonal relationships, captures the psychological processes underlying the development and maintenance

of this distinct type of relationship, and allows for prediction of both traditional and non-traditional outcomes associated with PSRs (e.g., television viewing habits, benefits to self-esteem). Applying the investment model moves us one step closer to understanding PSRs in the context of traditional interpersonal relationships and psychological processes.

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¹A CFA was conducted to examine global model fit. Using the data from Study 1, we assigned each of the 21 IMS items to the factor from which it was originally derived. Results indicated satisfactory model fit: the exact test of model fit was rejected, $\chi^2(174) = 355.57, p < .0001$, but descriptive model fit statistics indicated satisfactory fit (CFI = .91, RMSEA = .07; Chesney, Nielands, Chambers, Taylor, & Folkman, 2006; Vandenberg and Lance, 2000).

Table 1

Correlations and Descriptive Statistics among Investment Model Variables (Study 1, N = 259)

Variables	1	2	3	4	5	6	7	8
1. Commitment	–							
2. Satisfaction	.51***	–						
3. Investments	.52***	.49***	–					
4. Alternative: Other characters	-.12*	-.21**	-.18**	–				
5. Alternative: Friends	-.22***	-.26***	-.38***	.16**	–			
6. Alternative: No characters	-.41***	-.33***	-.24***	.04	.34***	–		
7. Frequency of viewing	.10	.09	-.08	-.01	.01	-.14*	–	
8. Duration of viewing	.19**	.19**	.23***	.04	-.02	-.20***	.16*	–
<i>M</i>	4.33	5.01	2.51	4.99	6.26	3.72	2.97	3.01
<i>SD</i>	1.45	1.63	1.92	1.50	1.76	2.02	.68	.88
<i>α</i>	.77	.84	.88	.67	.88	.84		

* $p < .05$, ** $p < .01$, *** $p < .001$

Table 2

Stepwise Regression Analyses for Predicting Commitment to Favorite Fictional Television Character (Study 1)

Variable	<i>B</i>	<i>SE B</i>	<i>B</i>	F(df)	R ²	ΔR ²
Step 1				5.64(2, 256)**	.042	
Frequency of viewing	.15	.13	.07			
Duration of viewing	.30	.10	.18***			
Step 2				26.25(7, 251)***	.380	.338***
Frequency of viewing	.15	.11	.07			
Duration of viewing	.01	.08	.00			
Satisfaction	.23	.05	.26***			
Investments	.28	.05	.37***			
Alternative: Other characters	-.01	.05	-.01			
Alternative: Friends	.06	.05	.07			
Alternative: No characters	-.19	.04	-.26***			

p* < .05, *p* < .01, ****p* < .001

Table 3

Means of Investment Model Variables for Fictional and Non-fictional characters (Study 2)

	Fictional (N = 106)			Non-fictional (N = 90)			t
	<i>M</i>	<i>SD</i>	<i>α</i>	<i>M</i>	<i>SD</i>	<i>α</i>	
Commitment	4.39	1.50	.79	3.67	1.29	.70	3.56***
Satisfaction	4.88	1.55	.82	5.01	1.57	.85	-.69
Investments	2.42	1.72	.86	1.70	1.69	.90	2.95**
Alternative: Other characters	5.33	1.47	.73	5.13	1.47	.66	.97
Alternative: Friends	5.68	2.03	.90	6.51	1.86	.95	-2.97**
Alternative: No characters	3.20	2.16	.80	4.27	1.95	.85	-3.57***

* $p < .05$, ** $p < .01$, *** $p < .001$

Table 4

Correlations among Investment Model Variables for Fictional and Non-fictional Characters (Study 2)

Variables	1	2	3	4	5	6	7	8
1. Commitment	–	.62***	.46***	-.09	-.15	-.32**	.32**	.10
2. Satisfaction	.47***	–	.48***	-.08	-.29**	-.31**	.30**	.12
3. Investments	.46***	.40***	–	-.22*	-.52***	-.23*	.02	.14
4. Alternative: Other characters	-.15	-.15	-.23*	–	.28**	.14	.05	-.10
5. Alternative: Friends	-.31*	-.30**	-.29**	.26**	–	.24*	.14	-.09
6. Alternative: No characters	-.46***	-.39***	-.09	.08	.38***	–	-.29**	-.24*
7. Frequency of watching	.15	.13	.07	-.03	.16	-.17	–	.16
8. Duration of watching	.19	.27**	.16	-.01	-.10	-.16	-.02	–

Note. Values below the diagonal are for correlations involving fictional characters (N=106). Values above the diagonal are for correlations involving non-fictional character (N=90).

* $p < .05$, ** $p < .01$, *** $p < .001$

Table 5

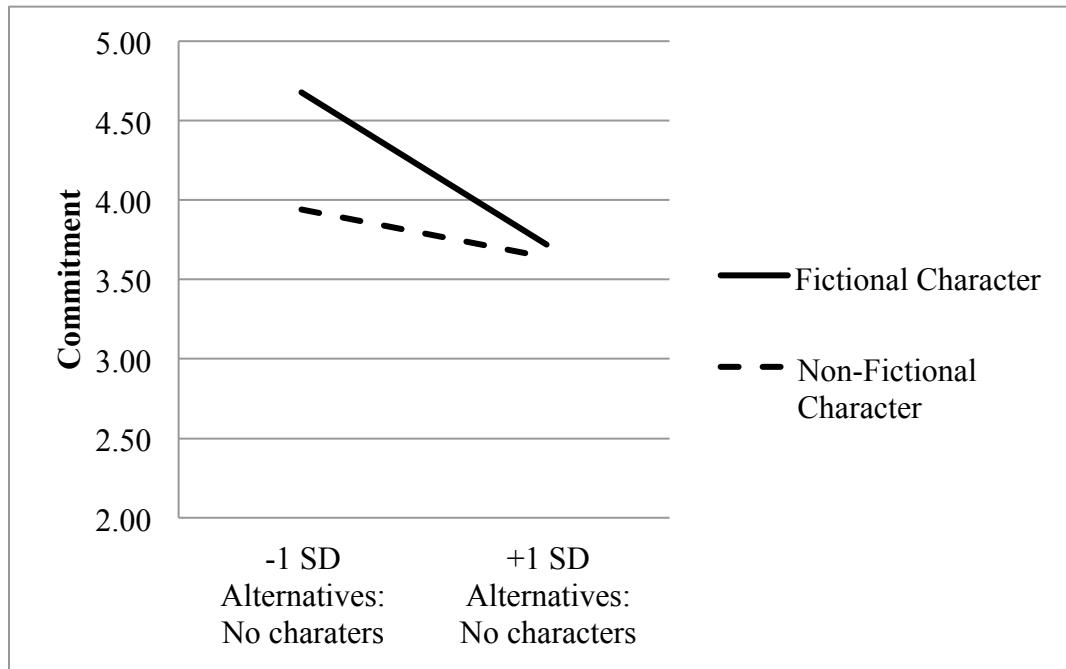
Summary of Moderated Regression Analyses (Study 2)

Variables	<i>B</i>	<i>SE B</i>	<i>B</i>	<i>t</i>	F(df)	R ²	ΔR ²
Step 1					10.45(2, 191)***	.099	
Frequency of Viewing	0.51	0.15	0.24	3.42***			
Duration of Viewing	0.27	0.11	0.18	2.59**			
Step 2					18.29(8, 185)***	.442	.343
Character Type	-0.39	0.18	-0.14	-2.17*			
Satisfaction	0.28	0.06	0.30	4.55***			
Investments	0.23	0.06	0.28	4.19***			
Alternative: Other characters	-0.01	0.06	-0.01	-0.15			
Alternative: Friends	0.02	0.05	0.02	-0.31			
Alternative: No characters	-0.16	0.04	-0.23	-3.59***			
Step 3					11.99(13, 180)	.464	.022
Character x Satisfaction	0.18	0.12	0.13	1.46			
Character x Investments	-0.07	0.12	-0.06	-0.61			
Character x Alternative: Other characters	0.00	0.12	0.00	0.00			
Character x Alternative: Friends	0.12	0.10	0.10	1.21			
Character x Alternative: No characters	0.16	0.09	0.15	1.80 [†]			

Note: Character type coded 0 = Fictional and 1 = Non-Fictional

p* < .05, *p* < .01, ****p* < .001, [†]*p* < .07

Figure 1. The interaction of character type and Alternatives: no characters predicting commitment.



Note: Values are plotted for individuals scoring 1 *SD* above and 1 *SD* below the mean on Alternatives: no characters.