

Rapid Communication

“They May Be Pixels, But They’re MY Pixels:” Developing a Metric of Character Attachment in Role-Playing Video Games

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ABSTRACT

This paper proposes a new and reliable metric for measuring character attachment (CA), the connection felt by a video game player toward a video game character. Results of construct validity analyses indicate that the proposed CA scale has a significant relationship with self-esteem, addiction, game enjoyment, and time spent playing games; all of these relationships are predicted by theory. Additionally, CA levels for role-playing games differ significantly from CA levels of other character-driven games.

INTRODUCTION

THE HISTORY OF MASS MEDIA RESEARCH has been rife with discussions about how audiences build friendships and identify with media characters. Theories of parasocial interaction (PSI) explain that audiences form a feeling of intimacy with a distal, fictional character.¹ Identification can be thought of in terms of a deep, internalized phenomenon in which audiences imagine being somebody else,² including a media character.³

As scholars have increased their study and scrutiny of the video game medium,⁴ questions about how the individual gamer interacts with the game character have become central to the research paradigm. In interactive video games, there is no parasocial interaction with a fictitious character, no *felt* connection per se, but an *actual, tangible* connection between the gamer and a fully functional,

completely controllable avatar. Of particular interest to our study is the increasingly popular role-playing game (RPG) genre. The central element for RPGs is character and story development as a result of the player’s actions. The main purpose behind RPGs is to let gamers immerse themselves in the world and psyche of their character(s).⁵ Thus, what separates RPGs from other character-driven entertainment media is this internalization and psychological merging of a player’s and a character’s mind⁶—a phenomenon we call *character attachment*.

Although we present CA as a new construct, it is rooted in the aforementioned audience-character interaction theories, while incorporating the notions of suspension of disbelief (an individual’s willingness to accept the world of the character as “real”), responsibility (an individual’s feelings of custody over the character), and control (the extent to which

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the individual can manipulate the actions of the character). Thus, we define CA as an individual's feelings of (a) friendship and (b) identification with a video game character when an individual (c) is willing to suspend disbelief, (d) feels responsible for the game character, and (e) feels in control of the game character's actions. (For a more in-depth discussion of the theoretical roots of character attachment, see Weber et al.,⁷ available from the authors upon request.)

This paper presents a metric for measuring CA, using items derived from each of the five dimensions stated above. As a construct validation of the CA scale, we propose a set of theoretically relevant associations with other variables.

METHOD

Participants

Participants for this study were recruited from two American universities (one Midwestern, one West Coast) as well as several online game forums. The sample consisted of 572 respondents, with a mean age of 22.15 ($SD = 7.51$). By gender, the sample contained 256 males and 312 females, with four no-responses.

Scale construction procedure

An initial pool of 98 items was generated by the researchers that contained items related to identifi-

TABLE 1. VARIMAX FACTOR STRUCTURE OF THE 17-ITEM CHARACTER ATTACHMENT SCALE

Item**	Factor: 1	2	3	4
Factor 1: Identification/Friendship (Cronbach's $\alpha = 0.872$, standardized $\alpha = 0.874$)				
I sometimes forget my own feelings and take on those of my character.	0.853	-0.087	-0.042	0.099
I enjoy pretending my character is a real person.	0.815	-0.111	0.011	0.059
I consider my character a friend of mine.	0.770	-0.075	-0.005	0.186
I enjoy pretending I am my character.	0.744	-0.210	0.059	0.181
I could see myself being attracted to my character.	0.718	0.006	-0.082	0.063
I daydream about my character.	0.646	-0.104	0.106	0.270
Factor 2: Suspension of Disbelief (Cronbach's $\alpha = 0.845$, standardized $\alpha = 0.847$)				
I direct my attention to possible errors or contradictions in the video game.*	-0.065	0.864	-0.119	-0.057
It is important for me to check whether inconsistencies are present in the video game.*	-0.132	0.843	-0.049	-0.152
I concentrate on whether there are any inconsistencies within the video game.*	-0.121	0.767	-0.138	-0.172
I think about whether the action or the video game presentation was plausible.*	-0.104	0.741	0.006	0.010
Factor 3: Control (Cronbach's $\alpha = 0.758$, standardized $\alpha = 0.795$)				
I enjoy controlling my character.	0.041	-0.074	0.873	0.083
I control my character.	-0.165	-0.065	0.862	0.062
My character does what I want him/her to do.	0.028	0.010	0.765	0.164
I get frustrated when my character does not perform the way I want him/her to.	0.064	-0.127	0.628	0.031
Factor 4: Responsibility (Cronbach's $\alpha = 0.829$, standardized $\alpha = 0.830$)				
I know what my character wants.	0.231	-0.113	0.089	0.842
I know what my character needs.	0.178	-0.028	0.203	0.815
I make decisions with my character's best interests in mind.	0.216	-0.200	0.057	0.784

*Reverse coded; **Item scale: 1 (strongly disagree) to 7 (strongly agree).

cation, control, friendship, sense of responsibility, and suspension of disbelief. These items were submitted to a panel of experienced video game researchers to both determine face validity and pilot-test the 95-item questionnaire. Feedback from the panel suggested that we retain 45 of the original items; these items were given to a subset of our study sample ($n = 188$), and a principal components analysis (PCA) with varimax rotation was performed on this data. The resulting scale was a 17-item, 4-factor solution that explained 66% of variance. This final scale (see Table 1) was presented to the remainder of our study sample ($n = 384$) and used for our validation procedures. Character attachment was normally distributed ($M = 3.89$ on a scale from 1 to 7; $SD = 0.67$; skewness = 0.51; and kurtosis = 0.99).

Validation results

If the proposed CA is a valid measure of our construct, we should see relationships between CA and preference for the RPG game genre, RPG characteristic motivations for playing, enjoyment, time spent playing, game addiction, and self-esteem as predicted by theory. (For a more detailed explanation of these theoretical linkages, see Weber et al.,⁷ available from the authors upon request.) The prediction that CA scores would be higher in RPG gamers was supported: $t(270) = 2.941$, $p = 0.004$. For RPG players, the mean CA score was 3.96 ($SD = 0.68$). For players of other character-driven games (but non-RPG), the mean value was 3.70 ($SD = 0.60$).

The literature suggests that RPG gamers who score higher in CA are motivated to seek fantasy, diversion, and social interaction.⁸ Thus, CA should be positively associated with these motivations. Utilizing the Sherry et al. game-playing motivations scale,⁹ the highest correlation was found between fantasy and CA, $r = 0.461$, $p < 0.001$ ($n = 267$), and correlations between diversion and social interaction were also significant: $r = .255$, $p < 0.001$ ($n = 269$), and $r = 0.228$, $p < 0.001$ ($n = 269$), respectively (according to Cohen's classification, these effects can be considered as moderate). Interestingly, significant correlations were also found with the other motivations: arousal, $r = 0.408$ ($n = 267$); challenge, $r = 0.352$ ($n = 266$); and competition, $r = 0.226$ ($n = 268$), each at $p < 0.001$.

CA should also be positively correlated with game enjoyment, time spent playing games, and likely video game addiction; indeed this was the case. The correlation between CA and enjoyment for

RPG players was significant ($r = 0.228$, $p = 0.001$, $n = 194$), as was the correlation with playing time, calculated as total minutes per month spent playing ($r = 0.169$, $p = 0.009$, $n = 193$). We also found a significant correlation between CA and game addiction using Tejeiro and Moran's game addiction scale¹⁰ with $r = 0.358$, $p < 0.001$ for all respondents ($n = 256$) and $r = 0.372$, $p < 0.001$ for RPG gamers ($n = 185$).

Finally, we predicted that CA would moderate the relationship between self-esteem and video game playing such that for players with high character attachment, the correlation between self-esteem and video game playing is *negative* and stronger than for players with low character attachment. Indeed, for players with low character attachment, the correlation between self-esteem and playing time was -0.089 , $p = 0.171$ ($n = 171$), and for players high in character attachment this correlation was -0.254 , $p = 0.001$ ($n = 137$).

CONCLUSION

The 17-item scale presented in this paper reliably measures the construct of character attachment on four distinct components: identification/friendship, suspension of disbelief, control, and responsibility. The CA scale is valid. CA helps explain what attracts people to the genre and can be considered as a moderating variable for the relationship between self-esteem and video game playing.

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