

The Development of Parasocial Relationships on YouTube

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Continuing research on the development of parasocial relationships, the present study modernized a seminal study conducted by Rubin and McHugh (1987) investigating the relationship among communication, liking, and intimacy in forming a relationship with a television character. This study applied this research to the YouTube video sharing platform to see if such a relationship was evident on social media. Results of a structural equation model closely replicate the original findings, and confirmed that exposure to YouTube

predicted both social and physical attraction. This attraction was related to parasocial relationship formation, which then positively increased the relational importance. Overall, the results provide justification for extending the theoretical expectations of parasocial interaction to the YouTube context.

Keywords: parasocial relationships, new media, YouTube, attraction

In 1987, Rubin and McHugh sought to predict the antecedents and consequences of what Horton and Wohl (1956) termed parasocial interaction, “a one-sided interpersonal relationship that television viewers establish with media characters” (Rubin & McHugh, 1987, p. 280). Drawing from uses and gratifications and uncertainty reduction theories, Rubin and McHugh probed relationships among communication, liking and intimacy. Operationalizing communication as *exposure* to a televised character, liking as *attraction* to a televised character, and intimacy as the *importance* of the viewer’s relationship with a televised character, the authors developed and tested a path model, finding that attraction leads to parasocial interaction, and parasocial interaction to relational importance. In other words, the more attractive viewers find a television character, the more they like the character, and the more importance they attach to their parasocial relationship with that character. In the

intervening years, research on parasocial relationships has continued to support this model, and has been extended to radio (Savage & Spence, 2014), online communities (Bellantone & Martin, 2005); social networking sites (Baek, Bae, & Jang, 2013; Labrecque, 2014; Tsiotsou, 2015), and Twitter (Frederick, Choong, Clavio, & Walsh, 2012; Frederick, Choong, Clavio, Pedersen, & Burch, 2014; Stever & Lawson, 2013). The current study seeks to determine whether, and to what degree, these findings are also generalizable to YouTube, a market leader among video-sharing websites (Soukup, 2014). After laying the theoretical framework, and describing the specific context of YouTube, we describe the empirical results of a modernization and replication of Rubin and McHugh's seminal study in this novel context.

LITERATURE REVIEW

Parasocial Relationships

Psychologists Horton and Wohl (1956) argued that “[o]ne of the striking characteristics of the new mass media – radio, television, and the movies – is that they give the illusion of face-to-face relationship with the performer. The conditions of response to the performer are analogous to those in a primary group. The most remote and illustrious men are met as if they were in the circle of one’s peers ... We propose to call this seeming face-to-face relationship between spectator and performer a para-social relationship” (p. 215). Focusing on the communication phenomena at the center of relational development, Rubin and McHugh (1987) investigated whether, and to what degree, parasocial relationships followed similar or distinct patterns from those described by Berger and Calabrese (1975) for the development of face-to-face relationships. Berger and Calabrese’s (1975) stage model of relational development proposes a number of axioms to describe how communication activities move interpersonal relationships through entry, personal, and exit stages of interaction.

In their application of Berger and Calabrese’s model, Rubin and McHugh focused on three axioms. Axiom 1 posits that the frequency of communication and communicative interaction promotes the reduction of uncertainty, which in turn promotes more frequent communicative interactions, advancing a relationship. Applied to Rubin and McHugh’s

television context, this means that more exposure to a television personality should promote decreased uncertainty and therefore positive parasocial interaction by the viewer. In axiom 7, Berger and Calabrese (1975) propose that decreased uncertainty afforded by frequent interaction promotes liking, or *interpersonal attraction*. Rubin and McHugh adapted this axiom to the parasocial television context by proposing that more exposure to a television personality should promote attraction to that character (by virtue of the decreased uncertainty exposure affords). However, interpersonal attraction is a multifaceted variable: 1) attraction may refer to the degree to which one feels they are similar to, or would like to befriend the television personality (*social attractiveness*); 2) attraction may capture how physically appealing the viewer finds the television personality (*physical attractiveness*); or 3) attraction may describe how able, credible or reliable a television personality appears to the viewer (*task attractiveness*). In their analysis, Rubin and McHugh examine each aspect of attractiveness separately. Axiom 14 proposed by Berger and Calabrese asserts a positive relationship between interpersonal attraction and intimacy. For Rubin and McHugh, the interpersonal attraction a viewer feels toward a television personality promotes the development of a parasocial relationship with that personality.

Finally, Rubin and McHugh proposed that the degree to which a television viewer finds a relationship important would depend on parasocial interactions with that personality, as well as on the perception of that personality's attractiveness. Berger and Calabrese's model, and Rubin and McHugh's adaptation of it to the television context, is shown in figure 1 through their final path model.

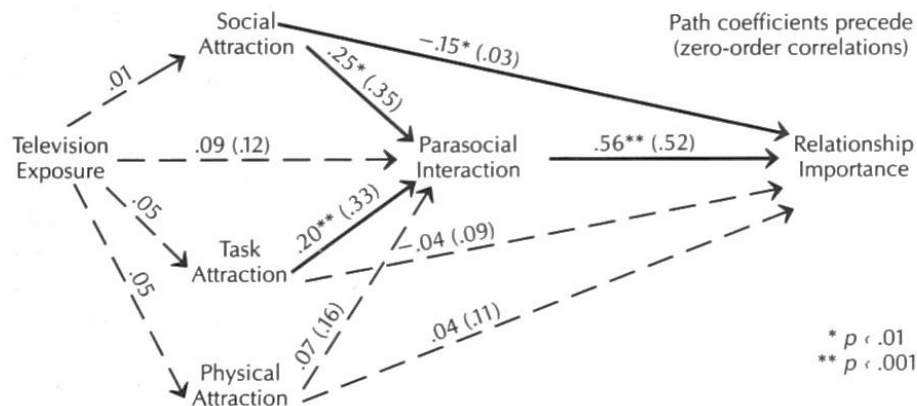


Figure 1. Path analysis of mediated attraction (Rubin & McHugh, 1987)

The results of Rubin and McHugh's analyses suggest that "physical attraction and television exposure were not integral in the parasocial relationship development process" and that social and task attraction were mediated by parasocial interaction (1987, p. 287). In other words, viewers finding a television personality likeable and capable promoted the feeling that the viewer had a relationship with that personality and influenced the degree to which this relationship was considered important.

Parasocial Relationships and New Media

While Rubin and McHugh's (1987) study specifically examined television as the context for parasocial relationship development, subsequent empirical research has investigated how parasocial relationships develop for different types of television figures. Research examining television news hosts (Levy, 1979), soap opera characters (Rubin & Perse, 1987), comedians (Auter, 1992), TV shopping hosts (Grant, Guthrie, & Ball-Rokeach, 1991), and talk show personalities show that parasocial relationships are strongest when a television personality engages the audience in some form of self-address and through repeated exposure (Koenig & Lessan, 1985). While parasocial *interactions* account for the emotional response of viewers to unique instances of viewership, the parasocial *relationships* investigated here describe affinities that develop through the repeated, or ongoing, exposure to a personality over time which is characteristic of social media interaction (Dibble, Hartmann, & Rosaen, 2016; Hartmann & Goldhorn, 2011; Horton & Wohl, 1956). Rubin and McHugh use the two terms interchangeably, but through the years of parasocial research the two terms have been divided and described as two different phenomena. The current research is an exploration into the relationships that develop after continued interactions.

Along those same lines, recent empirical work on parasocial relationships in new media suggests that the interactive nature of digital environments like Facebook (Joinson, 2008; Tsiotso, 2015) and Twitter (Bond, 2016; Frederick et al., 2012; Stever & Lawson, 2013) promotes parasocial interaction, and encourages some users to develop more parasocial relationships than interpersonal ones (Chen, 2014; Jin & Park, 2009). Parasocial research has long suggested that the human brain processes mediated experiences in ways like direct lived experiences and that viewers tend to respond to

media personalities in ways similar to the ways they respond to others with whom they have interpersonal relationships (Kanazawa, 2002). The ways in which viewers equate mediated experience with lived experience are enhanced on those media that offer an expanded interactive role; an active new media user may be more prone to experience parasocial relationships than even an active television viewer or radio listener (Chen, 2014). Bond (2016) explains that when television characters post to social media such as Twitter, they are providing “audiences with intimate, behind-the-scene peeks into their everyday lives and taste preferences” (p. 657). In addition, one consequence of interactive social networks is a collapse of the distinctions between users, viewers, celebrities, and the characters they play. As a number of researchers describe, viewers may “follow” or become “friends” with individuals they personally know, with others known through friends, with brands, organizations, and with both celebrities *and* their character representations (Frederick et al., 2012; Labrecque, 2014). However, although it is possible for interaction to occur on these social media, true back-and-forth relationships with celebrities or other media personalities are not always realized. As Baek and colleagues (2013) note, most use of Twitter and Facebook to access celebrities remains asymmetrical. This is to say that *access* to the celebrity does not necessarily promote a *relationship*. As a result of these characteristics of the social networking environment, some studies have shown a higher incidence of parasocial interaction on social networking sites than on traditional media (Frederick et al., 2012; Frederick et al., 2014; Stever & Lawson, 2013). As Bond (2016) explains, the strength of parasocial relationships on Twitter are in part explained by the expectation that Twitter is an “authentic channel” for celebrity voices. This can also be seen through the largest video form of social media, YouTube.

Parasocial Relationships on YouTube

Among social networking sites, YouTube (www.youtube.com) has become the market leader in video sharing (Bou-Franch, Lorenzo-Dus, & Garces-Conejos Blitvich, 2012; Soukup, 2014). The slogan of the site is, “Broadcast Yourself” and content creators, or *YouTubers*, take to the site to upload and share personally produced videos, segments of movies or television shows, or creative montages (Chen, 2014). In addition, YouTube integrates social networking features including subscribing to and commenting on others’

user generated content. Individuals may upload videos to their own channels, and subscribe to, and comment on, the channels of others, thereby engaging in person-to-person social interaction. Tolson (2010) argues that, as a social media site, YouTube reproduces “the feel of ‘face-to-face communication’” (p. 277). Because of these social networking affordances, YouTube has become a platform for a large number of virtual communities (Miller, 2012; Wattenhofer, Wattenhofer, & Zhu, 2012). YouTube allows individuals, celebrities and brands to generate individualized networks around their content. By allowing users to create and curate channels, YouTube also allows content creators to cultivate a specific character or personality across a collection of videos (Chen, 2014).

As previous work on social networking sites and parasocial relationships suggests, users are less likely to turn to YouTube to follow already established celebrities or stars than to develop affinities around amateurs (Chen, 2014; Labreque, 2014; Phelps, 2011). However, some of these amateurs become celebrities in their own right (Hartley, 2008; Lange, 2007) and a selected few become bigger stars among specific audiences than those in mainstream media (Ault, 2014).

Soukup (2014) explains that the majority of research on YouTube has been to introduce it (Paganini, 2013), outline its importance (Yanover, 2007), or situate it in terms of “new media” which has “turned consumers into producers” (Levinson, 2010, p. 1). In addition, existing research characterizes YouTube as a collection of virtual communities (Rheingold, 1993; Soukup, 2014). These YouTube communities focus on transmitting knowledge in users’ areas of interest (Miller, 2012; Soukup, 2014), but beyond knowledge transmission, Strangelove (2010) emphasizes the role YouTube plays as a “social space,” where interaction constitutes “... an intense emotional experience” (p. 4).

Interestingly, though YouTube represents a unique social networking environment, researchers examining parasocial relationships most often examine it as simply one among many other social networking sites, and find it falls well behind Facebook and Twitter in terms of where users prefer to seek out their favorite celebrities online (Lange, 2007). Indeed, only Chen (2014) examined YouTube as a unique context for the parasocial relationship. Using interviews with Taiwanese YouTubers, Chen (2014) found that these content producers actively work to elicit a parasocial response in their viewers, and

consider viewer responses like click-rates and comments key indicators of relationship development with their “fans.” This confirms that parasocial relationships are promoted and intentional on the part of YouTube personalities. This echoes Rubin and McHugh’s (1987) claim that television networks and producers actively and intentionally seek to cultivate parasocial relationships through their programming. However, to date, no empirical analysis of the parasocial response by YouTube viewers/users has been conducted. The current study therefore replicates Rubin and McHugh’s (1987) path analysis to determine whether and to what degree the model for parasocial relationship development found for television is generalizable to YouTube. It is proposed that the paths hypothesized by Rubin and McHugh (1987) for parasocial relationship development among television viewers will also be supported in the YouTube context. The relationships among hypotheses are shown in Figure 2.

- H1: YouTube exposure will be positively related to parasocial relationships with the YouTube personality.
- H2a: YouTube exposure will be positively related to degree of social attraction towards the YouTube personality.
- H2b: YouTube exposure will be positively related to the degree of physical attraction towards the YouTube personality.
- H2c: YouTube exposure will be positively related to the degree of task attraction towards the YouTube personality.
- H3a: Social attraction will be related positively to parasocial relationships.
- H3b: Physical attraction will be related positively to parasocial relationships.
- H3c: Task attraction will be related positively to parasocial relationships.
- H4a: Social attraction will be related positively to the perceived importance of a relationship with a YouTube personality.
- H4b: Physical attraction will be related positively to the perceived importance of a relationship with a YouTube personality.
- H4c: Task attraction will be related positively to the perceived importance of a relationship with a YouTube personality.
- H5: Parasocial relationships will be related positively to the perceived importance of a relationship with a YouTube personality.

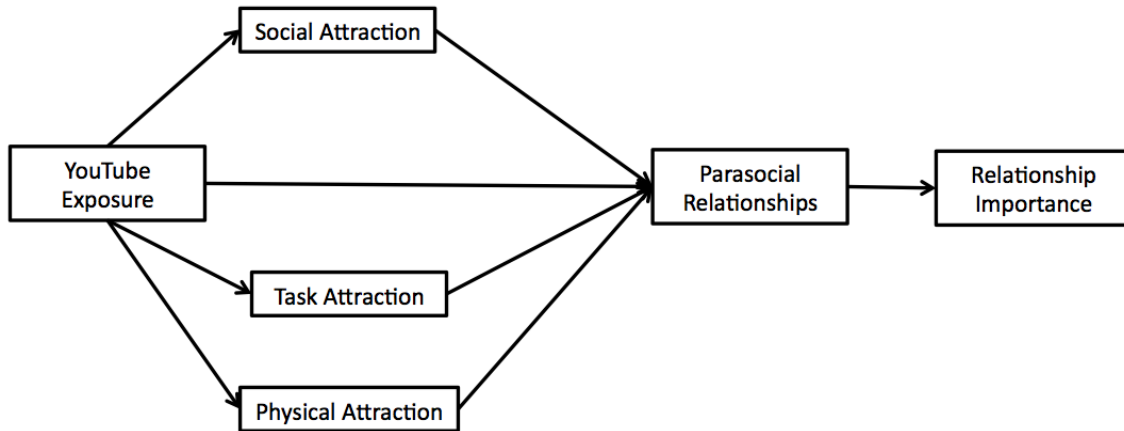


Figure 2. Proposed Path Model

METHODS

Sample and Procedures

Past researchers have noted that users of social media, especially YouTube, tend to be individuals between the ages of 12 and 36 years (Lo, Esser, & Gordon, 2010). This indicates that college-age students constitute an appropriate sample for the investigation of YouTube viewing habits. Considering college-age students (18-23 years) are more likely to view YouTube videos, the present study employs samples from two large American universities, one in the Northeast and one in the Southwest. A total of 293 undergraduate students received extra credit in their communication courses as an incentive for participation. Among participants, 59% identified as female ($n = 173$). As well, 31.4% ($n = 92$) reported being 18 years old, 40.3% ($n = 118$) 19 years old, 16.7% ($n = 49$) 20 years old, 6.8% ($n = 20$) 21 years old, 3.4% ($n = 10$) 22 years old, and 1.4% ($n = 4$) 23 years old or older. The study was approved by each university's Institutional Review Board (IRB). The survey was hosted online by Survey Monkey. Weblinks were posted on the course websites, which enabled interested students to participate confidentially.

Measures

YouTube Exposure. This anchor variable establishes a baseline of YouTube personality exposure. It was measured using two Likert-type items adapted from Frederick, Lim, Clavio, and Walsh (2012). Participants were asked to report the amount of time they spent on YouTube. The questions were: "how much time would you estimate

you spend on YouTube in an average day?” and “how long have you been watching videos on YouTube?” ($r = .15, p < .05$).

Parasocial Relationship. Parasocial relationship was measured by combining the items from Rubin, Perse, and Powell's (1985) Parasocial Interaction scale ($\alpha = .91$) and Auter and Palmgreen's (2000) Audience Persona scale ($\alpha = .91$). Auter and Palmgreen's scale was included as a more contemporary measurement tool and also because it is multifaceted enough to accommodate identification with a favorite YouTube personality, interest in a favorite YouTube personality, group identification/interaction, and a favorite YouTube personality's problem-solving ability. Because the development of a parasocial relationship requires multiple interactions between the viewer/user and the YouTube personality, respondents were asked to consider their *favorite* YouTube personality when answering the survey questions. The wording of the instructions and use of the combined scale ensured that respondents had been previously exposed to the YouTube personality and that we were testing a relationship and not an isolated interaction.

Respondents were asked to indicate their agreement on a Likert-scale ranging from strongly agree (5) to strongly disagree (1). Sample items include: “I like to compare my ideas with what the YouTube personality says” and “The YouTube character makes me feel comfortable, as if I am with friends” (Rubin, Perse, & Powell, 1985); “I can imagine myself as the YouTube personality” and “I can identify with the YouTube personality” (Auter & Palmgreen, 2000). A factor analysis of all 44 items confirmed that all items loaded on a single factor and represent a single measure of parasocial relationship. Cronbach's alpha for the combined measure was very strong ($\alpha = .95$). For analysis, and following Rubin and McHugh (1987), the mean response to the 44-item scale was used as the measure of parasocial relationship ($M = 3.22, SD = .61$).

Attraction. Following Rubin and McHugh, the 18-item social, physical, and task attraction scale developed by McCroskey and McCain (1974) was used. Respondents were instructed to consider the same favorite YouTube personality when indicating their agreement on a Likert-scale ranging from strongly agree (5) to strongly disagree (1). Sample items include: “I think the YouTube personality could be a friend of mine,” “I think the YouTube personality is quite attractive,” and “The YouTube personality would be a poor problem solver (reversed).” Two of the three subscales had good reliability.

Cronbach's alpha for the social attraction subscale ($\alpha = .70$) and physical attraction subscales ($\alpha = .81$) were good. However, items measuring task attraction yielded poor internal reliability ($\alpha = -.02$). Because of unacceptable reliability, task attraction was removed from the proposed model (see figure 3). Again, following Rubin and McHugh (1987), scores for each subscale were averaged: social attraction ($M = 3.5$, $SD = .63$); physical attraction ($M = 3.3$, $SD = .60$); and task attraction ($M = 3.02$, $SD = .43$).

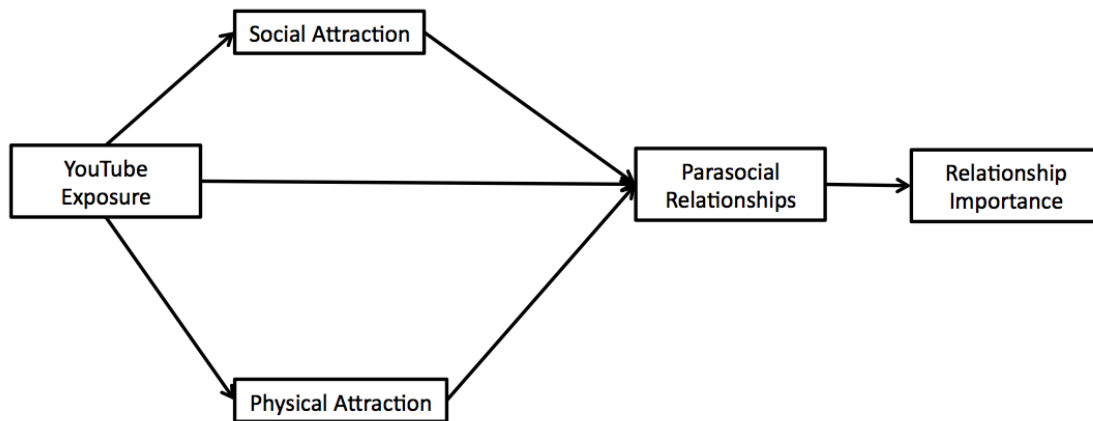


Figure 3. Revised Path Model

Relationship Importance. The importance of developing a relationship with one's favorite YouTube personality was measured using six questions used by Rubin and McHugh (1987). Respondents were asked to indicate their agreement on a Likert-scale ranging from "strongly agree" (5) to "strongly disagree" (1). Sample questions include: "Watching my favorite YouTube personality's channel is one of the most important things I do each day or each week," "I would rather watch my favorite YouTube personality's channel than visit with friends" and "I would rather watch my favorite YouTube personality's channel than attend a social activity." The reported Cronbach's alpha for this scale was ($\alpha = .90$).

Demographics. Participants were asked to report their age and biological sex.

RESULTS

Table 1 describes the means, standard deviations and correlations for the variables under investigation. Following Rubin and McHugh (1987), bivariate correlations were calculated.

Hypothesis 1 proposed that the amount of exposure to YouTube would be related to parasocial relationship development. Data revealed a significant, but low, correlation between the two variables ($r = .27, p < .01$).

Hypotheses 2a, 2b and 2c posited that social, physical and task attraction would each be positively related to YouTube exposure. Social attraction ($r = .22, p < .01$), and physical attraction ($r = .24, p < .01$) were significantly related to YouTube exposure. Because task attraction was eliminated from further statistical analysis, hypothesis 2c was not tested.

Table 1
Correlations and Descriptive Statistics of the Variables

		1	2	3	4	5
1	Exposure	1				
2	Parasocial relationships	.274*	1			
3	Social attraction	.217*	.514*	1		
4	Physical attraction	.242*	.407*	.407*	1	
5	Perceived importance	.075	.446*	-.088	.014	1
	<i>M</i>	3.17	3.22	3.51	3.28	2.22
	<i>SD</i>	.84	.61	.63	.60	.87

* $p < .01$

Social attraction ($r = .51, p < .01$), and physical attraction ($r = .41, p < .01$) were each positively related to parasocial relationships as stated in hypotheses 3a and 3b. As in the tests for the previous attraction hypotheses, task attraction was removed as one of the variables; thus, hypothesis 3c was not tested.

The results of correlation analysis revealed that social attraction ($r = -.09$, $p = \text{n.s.}$) and physical attraction ($r = .01$, $p = \text{n.s.}$) were not related to the perceived importance of the relationship, so 4a and 4b were rejected. As in the tests for the previous attraction hypotheses, task attraction was removed as one of the variables; thus, hypothesis 4c was not tested.

Parasocial relationships was positively related to perceived importance of a relationship with a YouTube personality ($r = .45$, $p < .01$).

All paths are significant, but fit for the proposed model fit was poor ($\chi^2 = 92.17$, $df = 4$, $p = .00$; $CFI = .66$; $CMIN/DF = 23.19$; $RMSEA = .28$). The inclusion of two additional paths (physical attraction \rightarrow social attraction, and social attraction \rightarrow relational importance), improved model fit significantly ($\chi^2 = 4.05$, $df = 2$, $p = .13$; $CFI = .99$; $CMIN/DF = 2.02$; $RMSEA = .059$). The final model (figure 4) includes the coefficients for each path. Furthermore, standardized path coefficients, standard errors and p-value of the final model are shown in table 2.

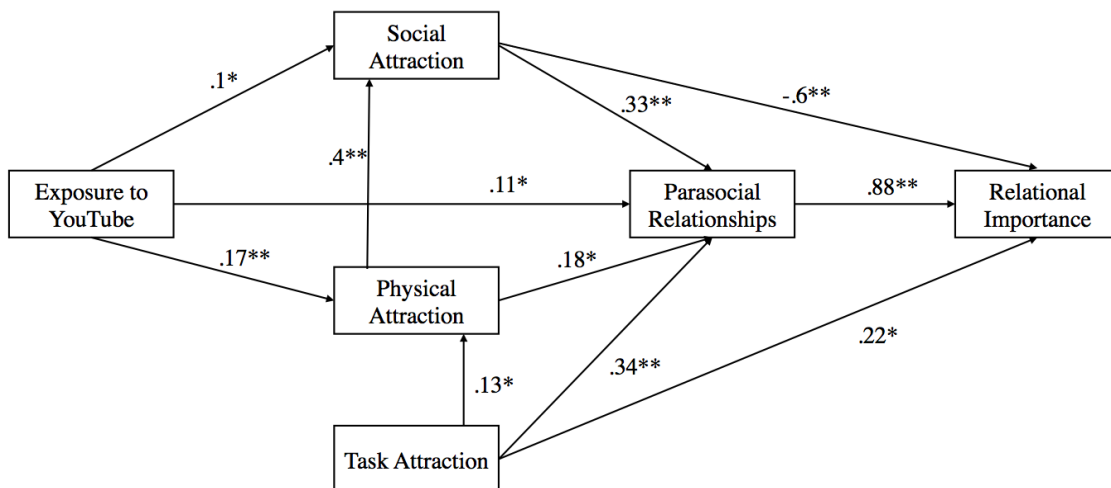


Figure 4. Final model including standardized coefficients for each path.

Table 2

Standardized Path Coefficients, Standard Errors and p-value

Paths	Standardized			
	Coefficients	SE	z-statistic	p-value
Exposure → Physical Attraction	.17	.041	4.2	.00
Exposure → Social Attraction	.1	.042	2.38	.02
Phys Attraction → Social Attraction	.4	.059	6.78	.00
Social Attraction → PSR	.38	.055	6.72	.00
Exposure → PSR	.11	.038	2.81	.01
Physical Attraction → PSR	.20	.058	3.44	.00
Social Attraction → Rel Imp	-.6	.081	-7.22	.00
PSR → Rel Imp	.93	.084	11.06	.00

DISCUSSION

The current study examined data about YouTube users to replicate and extended Rubin and McHugh's (1987) seminal study, which explored parasocial relationship development with television characters. Chen's (2014) study results suggest that YouTube provides a platform for the intentional creation of parasocial relationships between YouTubers and their audiences, but the user side of the experience has not been examined. Under the framework of relational development used by Rubin and McHugh (1987), this study aimed to replicate the structural model describing the relationships among YouTube exposure, attraction, and the importance of parasocial relationships with YouTube personalities.

The revised model predicted a number of direct effects. First, H1 predicted that increased exposure to YouTube leads to increased parasocial relationships such that individuals who reported higher levels of YouTube consumption reported higher levels of parasocial relationships with a YouTube personality. This aligns with past research on new media and parasocial relationships, which have found that increased exposure to new media (e.g., Twitter, social networking sites) was related to higher levels of parasocial relationships (Baek et al., 2013; Frederick et al., 2012; Stever & Lawson, 2013). Thus, it is

not surprising to find H1 confirmed, though exposure was not confirmed as a predictor in the original study.

Next, it was predicted that YouTube exposure would positively relate to the degree of attraction towards the YouTube content creator (H2a, H2b and H2c). The data provides some support for the assertion that exposure predicts attraction (McCrosky & McCain, 1974; Rubin & McHugh, 1987). The current study found that both social and physical attraction were positively associated with exposure to YouTube. This is consistent with Seidman and Miller's (2013) analysis of Facebook. However, the hypothesis that task attraction would also be related to YouTube exposure could not be tested. In a study on parasocial relationships with talk radio hosts, Rubin and Step (2000) found that task attraction did not emerge as a significant predictor for media exposure. However, task attraction, which has previously been linked to communication competence (Duran & Kelly, 1988), was found to be a significant predictor for seeking credible information from a radio talk show host (Rubin & Step, 2000). These results suggest that listeners developed parasocial relationships because of the perceived credibility of the radio talk show host. Because of the amateur nature of much of the production on YouTube (Chen, 2014), a credibility gap may be in effect for its audiences. Another possibility is that the amateur nature of YouTube makes the question of credibility less impactful for audiences than might otherwise be the case. Finally, research on the structure of YouTube's social network by Wattenhofer, et al (2012) found that commenters and subscribers constituted differentiated social circles on YouTube, and describe this as a "dichotomy of social and content activities" (p. 8). Whether and how this dichotomy reflects or produces a difference in terms of attraction is an interesting arena for further empirical work.

Social and physical attraction were each predicted to be related to parasocial relationships (H3a, H3b, H3c) and the importance of a parasocial relationship with a YouTuber (H4a, H4b, H4c). The results of the current study support the predicted positive relationship between social and physical attraction and parasocial relationship, replicating Rubin and McHugh's (1987) results. However, contrary to previous research that found positive relationships between all types of attraction the importance of a relationship with a television or social media personality (Frederick et al., 2012; Rubin, et al, 1987), social and physical attraction were *not* related to perceived importance of

YouTube relationships. One possible explanation for this finding lies in the distinction between parasocial *interactions* and parasocial *relationships* described above. Though the terms were often used interchangeably, researchers (Hartmann & Goldhorn, 2011; Horton & Wohl, 1956) distinguish parasocial interactions (specific instances of viewership or usership) from parasocial relationships (ongoing affinities which persist over time and result from multiple interactions or ongoing exposure) (Dibble et al., 2016). In other words, the support for H3a and H3b can be interpreted to mean that social and physical attraction promote individuals to interact with a YouTube personality in the short term (to click on a video, for example), but the results of H4a and H4b indicate that social and physical attraction alone do not promote the persistence of these relationships. The confirmation of H5, which links parasocial relationships to the perceived importance of a relationship with a YouTube content creator, further supports this interpretation. Consistent with developmental theories of interpersonal relationships (Buss, 1989), support for H5 suggests that mere attraction is not enough: some sequence or accumulation of interactions must take place before participants feel a “relationship” has begun to unfold.

The model fitting process suggested one unexpected path: for these data, physical attraction emerged as a predictor of social attraction. The unhypothesized relationship between physical attraction and social attraction, in retrospect, is unsurprising. As a visual medium which privileges appearance, YouTube users may be attracted initially to a personality’s appearance, and over time come to find them socially desirable. This is consistent with interpersonal relationship research, which also shows that physical attraction is a significant predictor of friendship and romantic relationship development (Barelds & Dijkstra, 2009; Buss, 1989). This path also helps to explain the confirmation of H3a and H3b, and rejection of H4a and H4b. Perhaps physical appearance promotes unique user interactions, but the gap between physical and social attraction must be bridged for that relationship to persist and to be considered important.

Overall, the results of the present study overwhelmingly confirm those presented by Rubin and McHugh (1987), and provide justification for extending the theoretical expectations of parasocial relationships to the YouTube context. As the emergence of new

media platforms continues to change how producers, viewers, users and others interact online, opportunities for deepening parasocial relationships are plentiful and important.

Results of the present study suggest several implications. First, these results contribute to parasocial relationship research by demonstrating that the theoretical framework of parasocial relationships is generalizable to YouTube. YouTube poses as a unique communication context to explore in the realm of parasocial relationship research because, according to Chen (2014), YouTube creators actively seek to have parasocial relationships with their audiences. As well, the popularity of YouTube and YouTube personalities, and the emergence of these as a distinct arena for celebrity has taken media industries by surprise (Ault, 2014). A better understanding of why this platform is so successful at transforming amateur content providers into stars has both theoretical and practical import.

This research also begins to help researchers and practitioners understand what makes some channels and personalities more successful than others. By understanding how parasocial relationships are cultivated between YouTube content creators and their users, this study can provide practical advice for YouTubers like those Chen (2014) interviewed about creating or maintaining a loyal YouTube following.

Another important implication emerged from the new findings of the causal link between the physical and social attraction. Because YouTube provides a platform for individuals to cultivate personalities that might be successful in creating parasocial interactions with viewers (Chen, 2014), knowledge about how the combined impact of physical and social attraction influences parasocial relationships could prove useful for individuals who want to become successful YouTube content creators.

The present study also has interesting practical implications. As evidenced by the study, individuals who have greater exposure to YouTube develop parasocial relationships with YouTube personalities and place higher relational importance on these relationships. This indicates that YouTube personalities may have the power to influence their viewers. Research in the field of entertainment education (Singhal & Rodgers, 2012; Slater, 2002) suggests that this influence could be exercised to promote positive behaviors. For instance, Collins, Elliott, Berry, Kanouse and Hunter (2003) found that after viewing an episode of the popular network television program *Friends* about condom-efficacy, most teens were

able to recall that condoms are not 100% effective in preventing pregnancy. The results of the current study suggest that embedding health and other behavioral messaging in YouTube content may be extremely effective. Future studies can investigate heavy viewers' intentions to adhere to messages communicated by YouTube celebrities.

Limitations and Future Research

The major limitation of this study is the necessity of removing task attraction from the analysis because of poor measurement. This constrains our ability to truly replicate Rubin and McHugh's analysis and to examine the role task attraction plays in parasocial relationships, and how it interacts with other forms of attraction. Closer examination and possible revision of the scale is necessary to overcome this limitation. Our choices of sample, variables, and paths reflect a close replication of Rubin and McHugh (1987), but future research should probe these relationships more deeply. In particular, the relationship between physical and social attraction in the context of parasocial relationships is a fruitful avenue for future work. Additionally, the findings in this research suggest that a renewed attention to the careful definition and disentanglement of parasocial interactions and parasocial relationships would be of particular value for new media which cannot depend on regular (daily, weekly) viewing. The media landscape is changing rapidly and YouTube is pulling ahead as an industry leader. More and more consumers are turning to the social media video platform in place of television (Williams, 2014) and it is important to understand the effects of that shift. The current research demonstrates that social and physical attraction continue to be a factor in the formation of parasocial relationships, which then increases relational importance.

Finally, while the results for YouTube are consistent with those found by researchers examining other social media, not all social media sites are created equal. Comparative analyses using this model would offer additional insight.

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