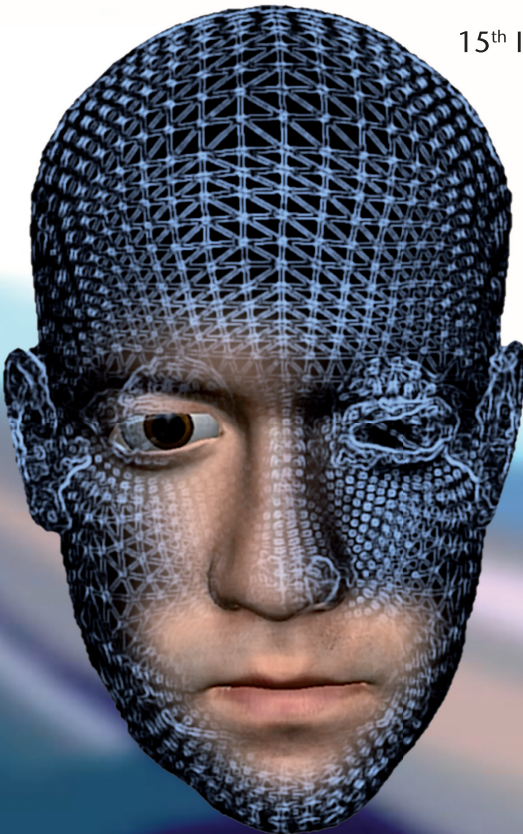


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Immediacy as an induction of parasocial relationships

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Abstract. People do not engage in information seeking on a health topic until they or someone they are very close to is already sick. Health communication scholars have a vested interest in inducing health information seeking so that individuals can learn about preventative health behaviors before they are sick. In alignment with the norms of interpersonal interaction, individuals do seek information on illnesses contracted by media presences they are attached to through parasocial relationships. Therefore, it is important to identify inductions of parasocial relationships that can be utilized to promote health information seeking. The present study tests a model in which immediate behaviors induce perceived immediacy which induces parasocial relationship development.

Keywords. Parasocial; immediate behaviors; perceived immediacy

Introduction

Parasocial relationships are perceived friendships between real people and fictional characters (Grant, Guthrie, and Ball-Rokeach, 1991). Parasocial relationships resemble interpersonal friendships in that both are personal, voluntary commitments, which provide companionship and are pursued on the grounds of social (Stephens, Hill, & Bergman, 1996) and romantic attraction (Boon & Lomore, 2001). Horton and Wohl (1956) originally conceived parasocial relationships to explain the attachment many people felt to news anchors in the 1950's. Initially, they expected that the attachment was attributable to loneliness, but learned that it was a much more complicated phenomenon through which viewers had formed a bond with these mediated presences. In fact, Horton and Wohl (1956) noted that individuals who formed parasocial relationships had bonded with these presences to a point in which they perceived them to be a counselor, comforter, and/or role model.

For the first two decades of study, parasocial relationships were framed as a mass media concept rather than perceived interpersonal relationships because the communication with these mediated presences was viewed to be one-sided, with the fictional character never directly reciprocating the viewer's feelings or concerns. Research presented since the conception of parasocial relationships has given evidence that parasocial relationships follow the rules and expectations of interpersonal theories including Berger and Calabrese' (1975) Uncertainty Reduction Theory (Perse & Rubin, 1989), Delia, O'Keefe, & O'Keefe's (1982) Personal Construct Theory (Perse & Rubin, 1989), Homan's (1961) Social Exchange Theory (Cole & Leets, 1999), and Bowlby's (1958) Attachment Theory (Cole & Leets, 1999).

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These findings have opened the door to study parasocial relationships as perceived interpersonal relationships. The pragmatic significance of parasocial relationships lie in health communication.

Statement of the Problem

Numerous studies have presented evidence that information seeking regarding a health topic is not a common phenomenon until a particular health concern becomes salient to the information seeker (Case, Andrews, Johnson, & Allard, 2005; Johnson, 1997; Johnson & Meischke, 1993; Jonas, Greenberg, & Frey, 2003; O'Keefe, Boyd, & Brown, 1998). In other words, for a health topic to become salient, either the information seeker or someone close to the information seeker must succumb to the illness. Yet, health information seeking is imperative so that preventative health behaviors can be learned and practiced to avoid future illnesses. Therefore, health communication scholars are faced with the challenge of identifying how to induce information seeking on a health topic while there is still time to prevent illnesses.

Notably, the norms of information seeking as associated with interpersonal relationships have shown to be true of parasocial relationships (Brown, Basil, & Bocarnea, 2003; Chapman, Holding, McLeod, & Wakefield, 2005). Because of this, health communication scholars can benefit from identifying how to induce parasocial relationships. As of yet, the task of creating a psychological bond with a media presence is without a controllable induction. The present study tests a model predicting that immediate behaviors will indirectly induce parasocial interaction.

Immediate Behaviors

Immediate behaviors are defined as any behavior which induces psychological or physical distance reduction between communicators (Richmond & McCroskey, 2008). Mehrabian (1966) first identified these behaviors in clinical psychology through comparing behaviors of psychiatrists with low vs. high patient disclosure rates. Over the next three decades, he validated this list of immediate behaviors: forward lean, eye contact, attentive body orientation, openness of posture, light touch to a nonthreatening body part, reduced physical distance, and relaxed posture (Mehrabian, 1981). Overall, individuals respond to these behaviors with increased liking and self-disclosure (Kelly & Kotowski, 2013a).

A long identified issue with this list of immediate behaviors has been that it is culturally bound. For example, eye contact is an immediate behavior in the United States, but can increase psychological distance in many Asian cultures (Kim & Nam, 1998). This issue was addressed by Kelly & Kotowski (2013a, 2013b) who identified that the immediate behaviors and their associated outputs are mediated by perception of the immediate behaviors, perceived immediacy. In short, immediate behaviors positively induce perceived immediacy (the reduction of psychological distance), which positively induces associated outputs. Following this logic, the present study predicts that immediate behaviors cause the reduction of perceived psychological distance with a media presence. The decreased psychological distance should, in turn, establish the perceived closeness of a parasocial relationship (Teoh & Cyril, 2008).

Therefore, the present study will test a model in which the indirect, positive relationship between immediate behaviors and parasocial interaction is mediated positively by perceived immediacy. Although parasocial interaction is most often studied among television characters, the present study will target news anchors for two reasons. First, Horton and Wohl (1956) originally identified parasocial interaction through attachment to news anchors. Second, and more importantly, the process of strategically incorporating health information into a script is more pragmatically done for a news broadcast than television series plot, making news anchors of greater use for health communication scholars than television series characters.

Methods

Subjects

The sample was composed of $n = 366$ undergraduate students at a moderate sized southeastern university who all identified themselves to be news viewers. Among the sample, 43.4 % were male and 56.6% female. Ethnicity broke down as follows: 85.2% Caucasian, 5.5 % African American, 3.8 % Asian, 0.8% Hispanic, 0.5% Latino, 0.3% Native American, and 3.8 % Other. The average age of subjects was $M = 20.9$ ($SD = 7.1$).

In addition to biological demographics, news preferences were also collected that may moderate the data. The favorite news anchor of 34.7% of the sample appeared on local stations and 65.3% on cable. In terms of delivery style, 54.6 % of subjects indicated that their favorite news anchor was satirical and 45.4% indicated that their favorite anchor was serious. Additionally, 26.8% of the sample followed their news anchor through the station's website or social media while the remaining 73.2% only watched television broadcasts. The majority of participants preferred to follow their favorite anchor through television broadcasts (86.1%) or a combination of broadcasts and social media (11.5%) rather than strictly through social media (2.5%).

Procedures

Subjects were presented with a hyperlink to an online questionnaire through a human subject pool that was composed of public speaking students. The public speaking course served as a general education requirement; as such, the students the subject pool represented all majors. Subjects were encouraged to choose from a list of research studies made available through the pool during the semester in exchange for course credit. A filter was set within the subject pool to allow participation of only students who were at least 18-years-old and considered themselves to be news viewers. This method of solicitation resulted in a 23% response rate. The link took each participant to a welcome screen containing an informed consent. Subjects were informed that by clicking next to continue to the survey they were giving their consent. The survey was described to subjects as an attempt to understand preference to news anchors. Subjects were instructed to think only of their favorite news anchor throughout the entire questionnaire and spent approximately 15 minutes completing the questionnaire. No incentive was offered for participation beyond course credit.

Instrumentation

Parasocial interaction was measured through the audience-persona interaction measure (Auter & Palmgreen, 2000). Auter & Palmgreen (2000) developed the measure specifically for assessing parasocial interaction with prolonged exposure media, particularly television series. The measure included four dimensions of parasocial interaction: identification with the character, investment with the character, identification with the group surrounding the character, and identification with the character's problem-solving skills. Auter & Palmgreen (2000) reported that the measure has excellent content validity. Because news anchors report facts rather than opinions and often do so as a solo entity, it was unlikely that identification with the character or identification with the character's group would be relevant to the current study, making the measures of identification with character and identification with group unlikely fits for the present study. All four submeasures were included in the questionnaire though. Each measure was composed of Likert-type items with seven-point response scales ranging from Strongly Disagree to Strongly Agree.

An adapted version of Kelly's (2012) measure was used to assess perceived immediacy. The original measure was a semantic differential measure with 14 items, but it was converted into a Likert-type measure to meet the limitations of the online questionnaire delivery. The original measure was reported to have good content and concurrent validity. Participants were asked to rate on a seven-point response ranging from Strongly Disagree to Strongly Agree whether indicato-

rs were accurate descriptions of their favorite news anchor. Kelly (2012) reported that the measure has good face, convergent, and content validity.

Immediate behaviors were assessed using McCroskey's et al. (1995) revised immediate behaviors measure. McCroskey et al. (1995) stated that the measure had excellent predictive validity. Subjects were presented with nine Likert-type items listing behaviors that their favorite news anchor might display and asked to indicate on a seven-point response scale ranging from Strongly Disagree to Strongly Agree whether the descriptions were accurate.

Results

Measurement Models

All measurement models were assessed with Confirmatory Factor Analysis (CFA) to evaluate internal consistency and parallelism using the AMOS maximum likelihood parameter estimation algorithm. This algorithm estimates factor loadings for items based on a hypothesized measurement model to compare with the observed model. Each measure was first tested individually for internal consistency issues. Next, the measures were tested for parallelism to check concurrent and discriminate validity. During these tests, weak items and items that caused substantial error were removed. As anticipated, the identification with the character and identification with the characters' group caused substantial amounts of error across all other measures. As such, they were removed from further analysis. From the CFAs, one item was removed from the perceived immediacy measure, one item was removed from the investment measure, one item was removed from the problem-solving measure, and three items were removed from the immediate behaviors measure. The fit statistics can be seen in Table 1 and index statistics in Table 2. Given the misfit of two of the four parasocial interaction measures, the proposed model is illustrated in Figure 1.

Hypothesis Testing

The first hypothesis predicted that immediate behaviors would be positively related to perceived immediacy. A Pearson correlation tested this hypothesis. Data were consistent with a moderate positive relationship between solidarity and satisfaction [$r = .49$, $P(.41 \leq \rho \leq .56) = .95$; corrected for attenuation due to measurement error (\hat{r}) $\hat{r} = .60$, $P(.53 \leq \rho \leq .66) = .95$]. The corrected and uncorrected correlation matrices can be found in Table 3. The second hypothesis predicted that perceived immediacy and investment would be positively related. A Pearson correlation tested this hypothesis. Data were consistent with a moderate positive relationship between satisfaction and motivation [$r = .45$, $P(.36 \leq \rho \leq .53) = .95$; corrected for attenuation due to measurement error (\hat{r}) $\hat{r} = .52$, $P(.44 \leq \rho \leq .59) = .95$]. The final hypothesis predicted that perceived immediacy and problem solving would be positively related. A Pearson correlation tested this hypothesis. Data were consistent with a moderate positive relationship between solidarity and satisfaction [$r = .45$, $P(.37 \leq \rho \leq .53) = .95$; corrected for attenuation due to measurement error (\hat{r}) $\hat{r} = .51$, $P(.43 \leq \rho \leq .58) = .95$].

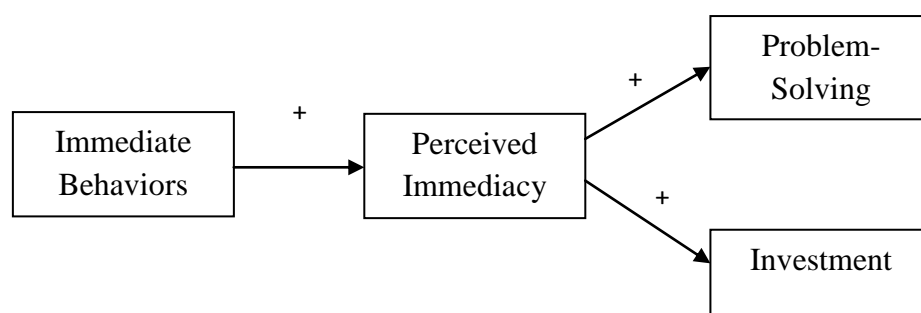


Figure 1. Proposed Model

Table 1. *Fit Statistics*

	χ^2	GFI	RMSEA
Unidimensional Models			
Immediate Behaviors	(8, $N = 310$) = 31.9, $p < .05$	0.97	0.08
Perceived Immediacy	(9, $N = 366$) = 154.08, $p < .05$	0.94	0.17
Investment	(5, $N = 366$) = 16.3, $p < .05$	0.98	0.08
Problem-Solving	(2, $N = 366$) = 4.9, $p > .05$	0.99	0.06
Four Factor Model	(164, $N = 366$) = 516.64, $p < .05$	0.87	0.08

Notes. GFI = Goodness of Fit Index, RMSEA = Root Mean Square Error of Approximation

Model Testing

Ordinary Least Squares Estimation (Kelloway, 1995) was used to test the predicted path model. In a three variable causal chain, if mediation is occurring, then the product of the direct effects will be within sampling error of the observed indirect effect. The data were inconsistent with the model as proposed. More specifically, the observed relationship between immediate behaviors and investment ($r = .49$) has a confidence interval of $P(.41 \leq \rho \leq .56) = .95$, which is not within sampling error of the predicted relationship ($r = .22$). The path also fails using the correlations corrected for attenuation due to measurement error. Furthermore, the observed relationship between immediate behaviors and problem-solving ($r = .48$) has a confidence interval of $P(.40 \leq \rho \leq .56) = .95$, which is beyond sampling error of the predicted relationship ($r = .22$). This path also fails using correlations corrected for attenuation due to measurement error.

Supplemental Analyses

The data were tested for potential moderators. Among participants whose favorite news anchors appears on cable vs. local television, there was a statistically significant difference in perceived immediacy [$t(364) = -.323$, $p < .05$; $\bar{x}(\text{cable}) = 5.25$, $\bar{x}(\text{local}) = 5.66$] and investment [$t(364) = 1.83$, $p < .05$; $\bar{x}(\text{cable}) = 5.28$, $\bar{x}(\text{local}) = 5.04$]. The model was retested using the effects observed within each subsample; the proposed model was still unsupported. Additionally, among participants whose favorite news anchors were serious vs. satirical, there was a statistically significant difference in immediate behaviors [$t(364) = 2.40$, $p < .05$; $\bar{x}(\text{serious}) = 5.50$, $\bar{x}(\text{satirical}) = 5.72$] and investment [$t(364) = 3.34$, $p < .05$; $\bar{x}(\text{serious}) = 4.98$, $\bar{x}(\text{satirical}) = 5.38$]. Again, the proposed model was unsupported when tested separately among these subsamples.

Table 2. *Index Statistics*

Variable	M	SD	Min-Max	Skewness	Kurtosis	Cronbach's α
Immediate Behaviors	5.61	.86	2.20-7.00	-.51	.12	.74
Perceived Immediacy	5.39	1.16	1.00-7.00	-.66	.54	.90
Investment	5.20	1.15	1.00-7.00	-.58	.44	.82
Problem-Solving	4.91	1.23	1.00-7.00	-.52	.70	.87

Discussion

Given the potential utility of parasocial relationships in health information seeking, the present study sought to identify whether immediate behaviors through perceived immediacy were inductions of parasocial interaction. The data were inconsistent with the proposed mediated model

Table 3.

<i>Correlations: Observed</i>				<i>Correlations: Corrected for Attenuation</i>			
Factor	Correlations			Factor	Correlations		
I-Behaviors				I-Behaviors			
P-Immediacy	0.50*			P-Immediacy	0.60*		
Investment	0.45*	0.43*		Investment	0.62*	0.52*	
P-Solving	0.49*	0.44*	.67*	P-Solving	0.60*	0.51*	0.79*
* $p < .05$				* $p < .05$			

Notably, the correlations between all four variables tested were within sampling error of each other.

Previous research has established that immediate behaviors are inductions of perceived immediacy (Kelly & Kotowski 2013a, 2013b). Taken together, the relationships observed amongst this set of variables can be explained with two equally likely possibilities.

First, it could be that the relationships between the parasocial variables and the immediacy variables are spurious in nature. If this is the case, then that would mean that there is an unidentified variable that induces parasocial interaction which was unidentified in the present study. Notably, because parasocial relationships are psychological it is likely that, similar to perceived immediacy, there exists an induction that is perceivable.

Second, it could be that immediate behaviors are an induction of both perceived immediacy and parasocial interaction. To reiterate, perceived immediacy is the perceived psychological reduction of distance and a parasocial relationship is the perceived connection to the mediated presence. These are conceptually similar psychological processes, yet distinct, as evidenced by the moderate magnitude of the relationships observed between these variables in the present study. Given the conceptual linkages though, it would be reasonable to consider that both of these psychological processes may be induced by the same variable: immediate behaviors.

As such, the next step in this line of research is to collect behavioral data, controlling for displays of immediate behaviors, to test if these behaviors are inductions for both parasocial relationships and perceived immediacy. This initial, exploratory study was limited in that it sought to investigate a causal relationship through survey methodology. Because the proposed model was mediated, patterns in the data may have supported causation, but the results were inconsistent with the model mediated model. As such, the next step in identifying inductions psychological connection to a mediated presence must be experimental.

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