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MORE THAN MEMORIES?

SCHEMA TRANSFERENCE FROM MEDIA CHARACTERS TO REAL PEOPLE

### MORE THAN MEMORIES? SCHEMA TRANSFERENCE FROM MEDIA CHARACTERS TO REAL PEOPLE

A thesis submitted in partial fulfillment of the requirements for the degree of Master of the Arts in Communication

By

Hilary Ray University of Arkansas Bachelor of Arts in Communication, 2007

> December 2011 University of Arkansas

### Abstract

This study focused on whether personality traits and evaluations of television personalities are used to make inferences about new social interaction partners. It tested the hypothesis that priming schemas of television personalities will bias inferences made about a stranger. The results were mixed. Participants in the experimental condition made more biased inferences about a stranger than did participants in the control condition. This transference was not influenced by participants' parasociability, and methodological limitations prevented conclusive study of the influence of affective evaluations in this effect. Future studies should attempt to increase methodological control and introduce a diverse set of measures to test for possible mediating and moderating variables. This thesis is approved for recommendation to the Graduate Council.

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# TABLE OF CONTENTS

I.	INTRODUCTION	1
II.	LITERATURE REVIEW	3
III.	HYPOTHESES	10
IV.	METHODOLOGY	13
	A. Participants	13
	B. Materials and Procedure	14
V.	ANALYSIS AND RESULTS	20
	A. Discussion	25
	B. Limitations	27
	C. Implications for Future Research	28
VI.	FOOTNOTES	30
VII.	REFERENCES	31
VIII.	APPENDICES	
	A. Irrelevant Adjectives from Anderson (1968)	34
	B. Audience Persona-Interaction (API) Scale	35
IX.	TABLE 1	36

#### Introduction

This study is intended to determine whether television personalities are capable of influencing inferences about people encountered in the real world. Because television appears to be a prominent tool in the socialization of most people (e.g., Gerbner & Gross, 1976), it would be valuable to know whether the personality traits of televised characters are stored as exemplars and used to make actual inferences about people we do not know. Television characters are often portrayed unrealistically (e.g., Holmes, 2007; Johnson & Holmes, 2009; Pardun, 2002), therefore our perceptions about behavioral and personality norms may be skewed if we take cues from such protagonists. The effects could be positive or negative. If information about media characters transfer into our perceptions and expectations of individuals we meet, then we may be disappointed to find out most people do not meet the standards of idealized television characters, potentially leading to dissatisfaction in genuine relationships (Baucom & Epstein, 1990). On a positive note, the media offer diverse characters that could help people learn tolerance (e.g., Schiappa, Gregg, & Hewes, 2005).

This study employs schema theory and transference as the theoretical underpinnings. Schema priming research has found support for the psychological concept of schema transference (e.g., Andersen & Baum, 1994; Andersen & Berk, 1998; Andersen & Cole, 1990; Andersen, Glassman, Chen, & Cole, 1995; Andersen, Glassman, & Gold, 1998; Brumbaugh & Fraley, 2006; Brumbaugh & Fraley, 2007; Chen, Andersen, & Hinkley; 1999; Glassman & Andersen, 1999a; Glassman & Andersen, 1999b; Hinkley & Andersen, 1996). These studies have found that significant relationship schemas, such as a parent schema, are highly accessible and likely to be used to quickly process new social situations.

1

While schema transference studies have been helpful in understanding the role of our significant relationship schemas in social perception, only two have studied the roles of other relationship schemas, such an acquaintance schema (e.g., Andersen & Cole, 1990; Andersen et al., 1995). This lack of research is of concern because it is quite possible that other relationship schemas, such as media character schemas, could have the complexity and accessibility to be cued in new social situations (e.g., Andersen & Cole, 1990; Fiske & Taylor, 1991).

For these reasons, the current study will seek to determine if our favorite television personality schemas may influence inferences made about someone we do not know. Following a media-adapted version of Andersen and Baum's (1994) schema priming paradigm, this study will assess whether people use their favorite television personality schemas when evaluating or making inferences about a person they do not know, and whether they are more likely to do so when they have had parasocial experiences with their favorite character.

#### **Literature Review**

#### Schemas

Have you ever felt like you have already met someone you are only just now being introduced to? Have you ever felt like you immediately like or dislike someone you just met, despite not knowing much about them? These inferences are all too common in our daily lives. Due to the uncertainty of new situations, our brains use shortcuts, or schemas, to anticipate new information (e.g., Bargh, Lombardi, & Higgins, 1988; Fiske & Taylor, 1991; Schneider, 1973). A schema is defined as a "cognitive structure that represents organized knowledge about a given concept or type of stimulus, including its attributes and relations among those attributes" (Fiske & Taylor, 1991, p. 98) that is abstracted from prior experience. We use schemas to filter incoming information and recall relevant information. This allows us to quickly process new information in terms of our previous experiences so that we are not overwhelmed by uncertainty.

All of our experiences have the possibility of being stored as schemas, but generally we choose to store only those we perceive as important. Fiske and Taylor (1991) explain that schemas are formed after one substantive example of an object, person, role, or event. Once a schema has been formed, new information must be either assimilated or accommodated (e.g., Piaget, 1970). If the new information reinforces or only slightly defies an existing schema, then it will be assimilated and stored within that schema. If the new information is highly incongruent with existing schemas, accommodation occurs. Either a new schema will be created, or the information will be ignored.

Explaining what schemas are, how they are formed, and how they are developed, is important to understanding how existing information gets used to anticipate new situations. Often the most complete or most recent schema will be used in any given situation (e.g., Fiske &

3

Taylor, 1991). Thus, if a stranger you meet reminds you of someone else you know, such as your best friend, you will likely use your existing knowledge about your best friend to anticipate the new person's behavior.

#### Transference

The idea that characteristics of one person may be transferred to another is not new. In fact, transference began as a psychoanalytic term defined by Freud (e.g., Hinkley & Andersen, 1996). Freud described transference as a tendency of psychopaths to make a "false connection" (p. 99) between conscious phenomena when true causation is not consciously perceived (Freud, Breuer, & Luckhurst, 2004). For example, a patient may be asked to explain their current state of depression. If they cannot consciously perceive the true cause of their current state of depression, they may look to what they are conscious of to explain it. If they remember that they did not particularly like a recent cold bath, for example, then they may advance the theory that it was the bath that caused their current state of depression. Freud found that only during hypnosis, could the true cause be revealed.

Beginning in the 1980's, researchers began to see how schemas could be used to explain Freud's transference phenomenon. Wachtel (1981) said that Piaget's theories of assimilation and accommodation together predict that people do not respond directly to stimuli, but experience stimuli in terms of their previous experiences. He argued transference could be an extreme version of this same phenomenon.

Susan Andersen and colleagues have investigated transference using a schema-based methodology for many years now (e.g., Andersen & Cole, 1990; Andersen & Baum, 1994; Andersen & Berk, 1998; Andersen & Glassman, 1995; Andersen et al., 1995; Chen et al., 1999; Glassman & Andersen, 1999a; Glassman & Andersen, 1999b; Hinkley & Andersen, 1996). Andersen & Cole's (1990) first study of transference sought to determine whether schemas of significant relationships would influence social perception more than less significant relationship schemas. They theorized that close relationship schemas were more unique, complex, and accessible. Thus, they may be used in social perception similar to more general or abstract schemas like stereotype schemas. To explain, newly encountered individuals' behaviors are often anticipated using a stereotype schema because these constructs are more abstract and include information general enough to fit fairly diverse groups of people. The more you get to know someone though, the more unique the construct becomes for your relationship with that person.

The question Andersen and Cole (1990) wished to answer was whether someone fitting a fairly unique description would be evaluated using a more unique schema. They found that significant relationship schemas, operationally defined as close relationship schemas, were richer and easier to access. They also found that personality characteristics from significant relationship schemas were transferred more often than personality characteristics found in less-significant relationship schemas, operationally defined as acquaintance, stereotype, or trait schemas. In other words, participants received descriptions of an unknown person that included personality characteristics they personally had given about an existing relationship schema. When they were asked to recall the descriptions of an unknown person they often "filled-in" the missing characteristics as if the description they were given was that of their existing relationship. This happened more when the traits were taken from the participant's descriptions of a significant relationship, such as a parental relationship or romantic relationship, than when the traits were taken from their descriptions of a less-significant relationship.

Andersen and Cole's (1990) schema priming methodology was used in many subsequent studies of schema transference (e.g., Andersen & Baum, 1994; Andersen & Berk, 1998;

Andersen et al., 1995; Brumbaugh & Fraley, 2006; Brumbaugh & Fraley, 2007; Chen et al.; 1999; Glassman & Andersen, 1999a; Glassman & Andersen, 1999b; Hinkley & Andersen, 1996). First, participants are primed by asking them to list personality attributes of the schemas in question. Then, after a few days, the participants return and are given descriptions of a stranger that contain items from the listing activity in the first part of the study. Since these elements should again prime the schema the participant described in the first study, a recall measure is used to determine how confidently participants remember items included, and not included, in the stranger descriptions. It is theorized that if the participant uses the primed schema to evaluate the stranger they will confidently remember items that were not given in the descriptions of the stranger because these elements are considered by the participant to be important to the primed schema. Thus, confidently misremembering elements not included in the stranger description determines whether the participant transferred characteristics from their primed schema to the stranger.

Using a similar methodology, Andersen and Baum (1994) sought to understand the role affect played in relational schema transference. They found that people not only tend to use their significant relationship schemas to make inferences about strangers slightly resembling their significant others, they also tend to transfer the emotions they have for their significant others to the strangers. For example, if participants were presented with a description of a stranger that slightly resembled the description of their mother, then any positive or negative emotions they felt towards their mother were reflected in the evaluations of the stranger.

Other more recent studies have attempted to fine tune Andersen's schema transference methodology. In 1999, Chen et al. wanted to discover whether increasing the number of similar traits between the unknown person and a significant other would increase the likelihood that the participant would "fill-in" the missing traits. They found that increasing the applicability of the significant relationship schema did increase the likelihood that participants would make inferences about the unknown person using their significant relationship schema. This was not found to be the case when traits from a stereotype schema or from a person with no schema were used. Glassman and Andersen (1999a) wanted to see if transference would be found when significant relationship schemas were primed subconsciously. They found that transference does occur unconsciously when significant relationship schemas are used.

These studies have found that significant other schemas are highly accessible and are likely to be used in social perception. While other schemas, such as acquaintance schemas, have shown some evidence of being used in social perception, they have been largely ignored in the study of schema transference. It is important to consider all of the types of relationship schemas that may be cued and activated in a social situation so that we may better understand the process of social perception, specifically how individuals make inferences about others.

#### Parasocial Interaction

Mass communication research has often suggested that media images may affect individuals' social perceptions. Cultivation theory and social cognitive theory have both found evidence that individuals sometimes use the information they have learned from the television to guide their thoughts and behaviors. Parasocial relationships, or interactions, occur when an individual believes he or she shares an interpersonal connection with a media persona (Perse & Rubin, 1989). Often individuals experiencing parasocial relationships will attribute the character's behaviors to some personality characteristic learned from repeated viewings (Perse & Rubin, 1989). People form impressions of the characters on television similarly to how they form impressions about real people (Klimmt, Hartmann, Schramm, 2006). After they have formed an impression of a character, viewers may experience a combination of cognitions, emotions, or behavior that are inspired by their parasocial relationship with a character (see Klimmt et al., 2006 for a list). Reviewing the list of cognitions viewers may experience as a result of parasocial interactions, it becomes clear that viewers may create schemata for their relationships with these characters. Viewers are capable of inferring goals, attitudes, and thoughts of media characters. They compare characters' past and present behaviors. They ruminate about the character's future. They evaluate the character, and compare the character to themselves. These are all cognitions we may encounter in our real relationships as a result of our relational schemata.

Several studies have found evidence of parasocial interaction, but one study helped to expand the parasocial interaction research by developing a scale that tapped several subdimensions of the parasocial interaction construct and by providing evidence of parasocial interaction occurring in situation comedies. Using qualitative questions about participant's favorite situational comedies and a few questions from Rubin, Perse, and Powell's (1985) parasocial interaction scale, Auter and Palmgreen (2000) constructed a 47-item scale for parasocial interaction. After administering this scale to participants and analyzing the results, 22items were kept that fell into four different sub-divisions of parasocial interaction theorized by Horton and Wohl (1956). These sub-divisions were identification with favorite television character, interest in favorite television character, group identification/interaction, and favorite television character problem solving skills. Using this scale, Auter and Palmgreen (2000) were able to find correlations between parasocial interaction and television exposure, perceived reality of television, and affinity for television programming.

Since parasocial relationship research suggests that individuals might develop a type of social relationship with certain characters that is more intense than simple knowledge about the

8

character (i.e. viewers may feel they would like the television character to be successful in their pursuits), it would follow that individuals experiencing parasocial interaction may have relational schemas for these characters that are more highly accessible than other television character schemas. Thus, this study will not only expand the current transference research to determine whether individuals might use television character schemas when making inferences about real people, but also whether parasocial interaction will intensify this effect.

#### Hypotheses

Television has become a large part of our lives and it has been argued television is a prominent tool in socialization of most people (Gerbner & Gross, 1976). However, none of the previous research of transference has sought to understand the influence of media in social perception. Several content analyses have determined television programming and films are filled with unrealistic relationship portrayals (e.g., Holmes, 2007; Johnson & Holmes, 2009; Pardun, 2002). If these unrealistic portrayals become prototypes or exemplars upon which we base our expectations of others, we may experience dissatisfaction in our relationships (Baucom & Epstein, 1990). For example, one study found that heavy users of pornography were less satisfied with their partners (Zillmann, 1989). On a positive note, if television portrayals become prototypes, it could teach people more tolerance for minorities (Schiappa et al., 2005). Therefore, it is important to understand whether television may be influencing our perceptions and expectations of people in the real world.

Fiske and Taylor (1991) discuss "schema triggered affect" as emotion that is triggered by the presence of a schema. When a schema is cued, the emotions stored within that schema are used to interpret the stimulus. This concept is what Andersen and Baum (1994) attempted to understand. They found that emotions felt about a significant other might be transferred to an unknown person resembling the significant other. Therefore, the current research predicts:

H1: The emotions felt for a favorite television personality will lead people to feel

positively about an unknown person resembling that character.

Andersen and colleagues have narrowed their definition of transference to only include significant other traits as transferable to unknown persons. This was decided despite the evidence found in Andersen and Cole's (1990) study that other relationship schemas, such as an

acquaintance schema, were almost as likely as significant relationship schemas to be used in social perception. This inconsistency has led the present researcher to question whether television personality schemas, could be used to make inferences about strangers. When an unknown person has several similar personality characteristics to a character they like on television, schema transference research suggests these similarities may inspire people to use their television personality schema to make inferences about a stranger's personality. Therefore, the current research predicts:

H2: The personality information stored about a favorite television personality will be

used to make inferences about an unknown person who resembles that character. Parasocial interaction research has found that viewers sometimes experience an intense connection with television personalities (e.g., Gleich, 1997; Horton & Wohl, 1956; Perse & Rubin, 1989; Schiappa et al., 2005). While the intensity of viewers' interactions with television personalities rarely matches the intensity of a face-to-face interaction, a pseudo-relationship may still be formed. Based on Andersen and Cole's (1990) findings, more significant relationships tend to have more complex schemas that are easier to access when evaluating or making inferences about an unknown person. Thus, the current experiment will predicts:

- H3a: Those who experience parasocial interaction with their favorite television personality will be more likely than those who do not, to use the personality information stored about their favorite television personality when making inferences about an unknown person who resembles that character.
- H3b: Those who experience parasocial interaction with their favorite television personality will be more likely than those who do not to evaluate an unknown person positively when that person resembles their favorite character.

#### Methodology

#### **Participants**

To test these hypotheses, a between subjects experimental design was developed to test for transference between participants favorite television characters and unknown persons. Students in undergraduate communication courses at the University of Arkansas, Fayetteville, were informed of an opportunity to participate in two studies held outside of class time for extra credit. A total of 74 participants (47 females, 27 males) participated in both sessions of the experiment, which resulted in thirty-seven participants in each experimental group.

Demographic information and information about the participants' television-viewing habits were gathered to describe the sample. Participant ages ranged from 18 years to 33 years. The mean age of participants was 20 years. The majority of participants were freshmen (56.8%), then sophomores (20.3%), juniors (16.2%), and seniors (6.2%). Participant reported television-viewing habits were highly varied. The number of hours each participant reported watching per week ranged from 2 to 30. Nearly 19% of participants reported watching 4 hours of television each week, 10% reported 10 hours each week, and 7% reported 3 hours each week. The mean reported number of hours of television watched per week was 9.8 hours.

In session one, participants were solicited to participate in this study on the last day of their class meeting that week. Participants who agreed to participate in the study were asked to write about their favorite television personality and complete a questionnaire meant to determine their level of parasocial interaction with that character. In order to receive extra credit for their participation, participants were required to attend the second session of the study. In the second session, participants were separated into four groups based on their parasociability.

The experimental and control conditions were each divided into two groups: high

parasociability and low parasociability. The experimental groups were given an explanation of a "peer" using sentences from their own descriptions of the personality traits of their favorite television personality. The control groups were then given an explanation of a "peer" using sentences describing physical features of a typical person.

#### Materials and Procedure

#### First Session: Gathering information about television personality schemas

Students were asked to participate in two university studies lasting a total of about 45 minutes for extra credit. In order to participate, the student must have regularly watched television programming at least one hour a week. Those who did not qualify for the study were given a different extra credit opportunity and were told they may leave. Students that did not participate in both studies did not receive extra credit, but they did not receive any other negative consequence. Those that agreed to participate were told that in this study, "the university wants to know what personality characteristics of television personalities are attractive to college students." Participants were told that the university was interested in understanding audience evaluations of television personalities because they would like to use this information in future recruitment videos. Participants were also told all of their responses would be confidential, and they were given an informed consent form to sign.

After participants agreed to participate and signed the informed consent form, they were instructed to "think about the television shows you have regularly watched in the last year. In those shows, which character stood out to you the most? Which character would you consider your favorite?" They were told they may write about any real or fictional personality from any television show as their favorite. To guide their thoughts about their favorite personality, participants were asked, "What is this person like? Think about the situations this person has experienced and think about the aspects of their personality that surfaced during these situations. What features of their personality made them unique from other television personalities?" Participants were told to write freely for seven minutes about the personality of their favorite television personality. After seven minutes, participants were told to stop writing. Their responses were gathered. The purpose of these descriptions was to help the participants begin thinking about their favorite character's personality.

After thinking about their favorite television personalities, participants received a piece of paper with ten blank lines on it. The participants were instructed to "write a descriptive word or phrase that uniquely describes the personality of your favorite television character in the blank. Each blank line should describe a different aspect of your favorite television character's personality. Please only describe aspects of this person's personality, not physical characteristics, such as pretty or homely." Participants were also instructed to "consider the personality characteristics that you feel uniquely describe this person and distinguish this person from others," by thinking "about what stands out about this person's personality in your mind. Many television personalities are friendly or likeable. Try to specify characteristics that would allow someone to guess what television personality you were talking about just by reading your responses."

Once the participants finished writing their adjectives, they were instructed to rank-order their responses "according to their importance in describing the character and distinguishing the character from other characters," giving a "1" to the most important, a "2" to the next most important, and so on, until all ten were ranked. The characteristics ranked 4-7 were then used to construct the experimental groups' "peer" descriptions given in the second session of the experiment. Using the participants' own, moderately descriptive trait descriptors in the descriptions of a "peer" provided an adequate degree of similarity between the "peer" and their favorite television personality. The intent was to prime the favorite television personality schema with moderately descriptive trait descriptors so the highly descriptive traits, that were likely more central to schema, could be used in the recall test. It was theorized that participants would be more likely to transfer characteristics that were more central to their schema (e.g., Andersen & Cole, 1990).

In order to match the participants with their own responses, participants were asked to provide their names on their responses. To prevent any of the participant's identifying information from being linked to his or her answers by anyone other than the researcher, immediately following the session, a number was assigned to each participant. This number was written at the top of each response and all identifying information was blacked out. The only copy of the legend was locked in the researcher's desk and shredded immediately following data analysis.

#### First Session: Gathering information for manipulation of experimental data

After participants finished ranking their adjectives, and handed in their responses, they were given 28 adjectives from Anderson's (1968) list based on relatively neutral likability ratings (see Appendix A). Participants were instructed to identify 10 adjectives that were descriptive (Y) of their favorite television personality, and 10 adjectives that were not descriptive (N). The remaining traits were to be left blank. It was assumed that the remaining items would be considered irrelevant to the television personality and could be used as filler descriptions in the experimental groups' "peer" descriptions to distract participants from identifying the true purpose of the experiment.

#### First Session: Gathering information about parasociability

Before completing the first session, participants completed a television-viewing questionnaire consisting of a few demographic questions and the seven-point Audience-Persona Interaction Scale (API) (Auter & Palmgreen, 2000). The API Scale was chosen because it has been shown to reliably measure four different sub-divisions of parasocial interaction as theorized in Horton and Wohl's (1956) seminal work on parasocial interaction. These sub-divisions are: identification with character, group identification/interaction, interest in character, and character's problem-solving ability. The questions meant to determine group identification/interaction ask about groups of characters on a specific television show. Because this study was interested only in participants' feelings about their favorite television personality, and not the other personalities on the show, these questions were not included as part of the scale. The three remaining sub-divisions were combined into a uni-dimensional measure of parasociability (see Appendix B). A median split was performed to divide participants into high and low experimental and control groups. Dividing the experimental and control groups into high and low parasociability provided the opportunity of determining whether the predictions of hypothesis 3a and 3b would be found.

Once all participants finished the television-viewing questionnaire, they were told the first study was over and they were debriefed. They were told that the researcher was looking to understand the television personality characteristics college students are attracted to because this information would be helpful in developing characters for University of Arkansas recruitment videos. Before leaving, a sign-up sheet was distributed for students to specify a time in the following week they could participate in the other study.

#### Second Session: Preliminary questions

In reality, the "other study" was the same and served as the second half of the present

study, held three days after the first session. Sixty-seven participants participated three days later. Due to scheduling issues, seven participants participated four days later. The amount of time between each participant's involvement in the first session and the second session was recorded to assure experimental conditions were consistent (Thorson et al., in press). Upon arriving to the "other University study" held in a different room than the first session, participants were given an informed consent form and were informed of the confidentiality of their responses. Participants were told "the University is interested in having a peer matching system," and that "this system would be used by the University to match upper classmen with freshman for peer advising." Participants were also told "the University thinks peer advising will be a better way to help freshman become integrated into college life and get help making decisions about classes or teachers to take from other experienced peers." Participants were told in this portion of the study "we are interested in how people respond to descriptions of peers because this will help develop a system for matching upper classmen with freshman."

Participants were given six descriptive statements about a "peer," allegedly gathered by a trained interviewer who had interviewed students a semester prior. Each descriptive statement appeared on a separate screen on a computer and participants were instructed to read each sentence twice. In both the experimental and control conditions, the gender of the television personality they specified in the first session matched the gender of the "peer" described. Four of the descriptive sentences began with "He/She is..." and ended with one of the participant's favorite television personality traits (ranked 4-7) worded exactly as the participant had. Two of the sentences started the same, but ended with an irrelevant descriptor randomly chosen from the adjectives participants left blank in the first session when asked whether the adjectives were either descriptive or not descriptive of their favorite television personality. These sentences were

used to manipulate the "peer" description so that the participant does not recognize the "peer" description as his or her own description of his or her favorite television personality. The six sentences appeared in random order. It was important these sentences appeared in random order for each participant to control for primacy and recency effects (Campbell & Stanley, 1963). In the control condition, participants were given six sentences beginning with "He/She is…" and ending with a generic physical characteristic, such as pretty/handsome or blonde/brunette/red-headed. The same six sentences were randomly presented to each of the control participants.

Previous research used personality characteristics in both the experimental and control conditions (e.g., Andersen & Baum, 1994; Andersen & Cole, 1990). This was possible because the characteristics given by each participant were highly personal, describing someone with whom they would have a significant relationship, such as a parent or romantic partner. Since many participants in this study had the same favorite television personality, and described them similarly, using another participant's favorite television personality characteristics in the control condition could have unintentionally primed control participants' favorite television personality. By using physical descriptions developed by the researcher previous to the study, it was much more unlikely control participants were primed with their favorite television personality.

After reading the descriptive sentences, the participants were asked to complete an evaluation measure about the "peer." The evaluation measure consisted of three evaluative questions from Andersen and Baum's (1994) study: "How interested do you think you would be in spending time with this person?" "How helpful do you think this person would be in making other students feel good about himself/herself?", and "How comfortable do you think another student would feel with this person?" Participants were instructed to rate each on a scale ranging from "1" ("not at all") to "7" ("extremely"). The dependent variable measuring participants'

evaluations of the "peer" was constructed from the average of their responses to these questions ( $\alpha = .81$ , M = 4.90, SD = 1.27).

#### **Analysis and Results**

#### Hypothesis 1

Hypothesis 1 predicts the emotions felt for a favorite television personality would lead people to feel positively about an unknown person resembling that character. To study this, participants filled out the above-mentioned evaluation of a "peer" and their mean score was calculated. To address hypothesis 1, the mean evaluation ratings of the "peer" of both the experimental and control groups were examined in a one-way between subjects ANOVA to determine whether experimental participants' average evaluation ratings of the descriptions of the "peer" provided were significantly different than control participants' (Williams & Monge, 2001).

Once participants evaluated the "peer," they were given a simple puzzle worksheet as distraction activity. This procedure ensured participants would not store the characteristics they had been given in short-term memory.

Following the distraction activity, participants were asked to complete a recognition memory test. All of the participants were given ten descriptive sentences. In the experimental conditions, four of the sentences appeared from the learning trial about the "peer" (those initially ranked 5 and 6 and two irrelevant adjectives) and six appeared that were not used in the learning trial (those initially ranked 1 through 3 and three irrelevant adjectives). In the control condition, four randomly chosen sentences from the learning trial appeared, and six other sentences describing physical characteristics appeared. The sentences for both the experimental and control groups were randomly ordered on the recognition memory test. Participants were instructed to rate their confidence that they had actually seen and learned each statement about the "peer" on a scale ranging from "1" ("confident that the sentence was *not* presented before") to "7" ("confident that the sentence was presented before"). This study focused on the *inferences* made about the "peer", therefore the dependent variable was constructed from the average confidence ratings of the descriptions *not* presented in the learning trial. After a review of the participants' responses, the dependent variable was composed of the mean of the experimental group's responses to the three relevant descriptions *not* presented in the learning trial, and control group responses to the five physical descriptions *not* presented in the learning trial (M = 1.99, SD = 1.55).<sup>1</sup>

Hypothesis 1 predicted experimental participants would rate their peer more likeable than control participants. A one-way ANOVA found experimental participants (M = 4.86, SD = 1.47) did *not* rate the peer more likeable than control participants (M = 4.94, SD = 1.04), F(2, 72) = .075, p = .785. Hence, the hypothesis was not supported.

#### Hypothesis 2

Hypothesis 2 predicts personality information stored about a favorite television personality would be used to make inferences about an unknown person who resembled that character. To address hypothesis 2, the mean confidence ratings for statements *not* appearing in the learning trial of both the experimental and control groups were calculated and examined in a one-way between subjects ANOVA to determine whether experimental participants' average confidence ratings for descriptive sentences *not* presented were significantly different than control participants' (Willams & Monge, 2001).

A one-way ANOVA was run to determine whether experimental participants would confidently remember descriptions *not* appearing in the learning trial more than control participants. The results were significant, F(2, 72) = 19.27, p < .001. Thus, hypothesis 2 was supported. Experimental participants (M = 2.70, SD = 1.90) confidently remembered more descriptions *not* presented in the learning trial than control participants (M = 1.29, SD = .50). *Hypothesis 3a* 

Hypothesis 3a predicts those who experienced parasocial interaction with their favorite television personality would be more likely than those who did not, to use the personality information stored about their favorite television personality when making inferences about an unknown person who resembled that character. To address hypothesis 3a, the mean confidence ratings were examined in a 2X2 factorial ANOVA (parasociability by confidence) to determine whether the average confidence ratings of the participants in the high parasociability experimental group were significantly different than the average confidence ratings of the other participants (Williams & Monge, 2001).

Hypothesis 3a predicted participants who experienced parasocial interaction would confidently remember descriptions *not* presented in the learning trial more than other participants.

#### Hypothesis 3b

Hypothesis 3b predicts those who experienced parasocial interaction with their favorite television personality would be more likely than those who did not, to evaluate an unknown person positively if that person resembled their favorite character. To test this hypothesis, the mean evaluation ratings were examined in a 2X2 Factorial ANOVA (parasociability by evaluations) to determine whether the average evaluation rating of the participants in the high parasociability group were significantly different than the average confidence ratings of the other participants (Williams & Monge, 2001).

To create the parasociability independent variable for these hypotheses a median split was performed with participants' responses to the Audience-Persona Interaction scale (API, Auter & Palmgreen, 2000). Participants were divided into two groups: high and low parasociability ( $\alpha = .85, M = 3.31, SD = .98, Mdn = 3.13$ ).

#### Second Session: Manipulation check and debriefing.

Once participants finished the recognition test, they were asked to rate each of the learning trial descriptions in terms of how well it described their own favorite television character from "1" ("not at all descriptive") to "7" ("very descriptive"). The dependent variable was constructed from the mean responses (M = 5.14, SD = 1.09).

Due to the likelihood that participants would share details about their session with other expected participants, all participants were completely debriefed by email following the completion of all of the sessions. This was necessary to assure that the participants who had already completed the second session did not reveal the purpose of the experiment to participants that had not yet finished the second session. The debriefing explained the University was not trying to develop a system to match peers and that this deception was necessary to examine how television personalities may influence the participants' impressions of people they did not know. The email provided detailed information about the purpose of the experiment, references to relevant literature, and participants were be told they may reply with any questions they had about the experiment. Once these emails were been sent, all identifying information for the participants was shredded.

Hypothesis 3b predicted participants who experienced parasocial interaction would evaluate the "peer" described in the second session more positively than other participants. When the parasocial scale questions were combined to form one parasociability variable, the results of the 2X2 Factorial ANOVAs for hypotheses 3a and 3b were not significant (p > .05). *Manipulation Check*  A one-way ANOVA was run to determine whether the experimental manipulation was effective. Experimental participants (M = 5.77, SD = .67) reported that the unknown person described in session two resembled their favorite television character more than control participants did (M = 4.51, SD = 1.06), F(2, 72) = 37.36, p < .001. Thus, the manipulation was successful.

#### Discussion

Hypothesis 1, and Hypothesis 3a and 3b were not found to be significant in this sample, but Hypothesis 2 was found to be significant. The insignificant findings of hypothesis 1 were not especially surprising. As Andersen and Baum's (1994) study predicted, it may be important to take into account the possibility that readily accessible schemas may not be affectively positive. Schemas storing negative emotions can be just as accessible, if not more so, than their positive counterparts. For example, an individual's favorite television character may be Eric Northman from True Blood (an untrustworthy vampire bent on deceiving others for his own gain). Yet, Northman is still a very popular character. If a participant were to describe Eric Northman in the data analysis session of this study, their descriptions may not be those of someone they'd like if they met them on the street. Therefore, future studies should spend the extra time to gather information about both the positive and negative traits of participants' favorite television characters. Doing so will likely lead to more detailed information about each participant's favorite television schema, and could lead to more significant results.

Hypothesis 2 most reflected the primary thesis of this study. The significant results of this hypothesis conclude many television viewers may be using their favorite television character schemas to make inferences about strangers they encounter in their day-to-day lives. This finding is significant because it is the first study to find evidence of schema transference from media to real life. While many previous studies have found evidence that people use schemas developed from real-life experience with significant others to make inferences about strangers (e.g., Andersen & Baum, 1994; Andersen & Berk, 1998; Andersen & Cole, 1990; Andersen et al., 1995; Andersen et al., 1998; Brumbaugh & Fraley, 2006; Brumbaugh & Fraley, 2007; Chen et al., 1999; Glassman & Andersen, 1999a; Glassman & Andersen, 1999b; Hinkley & Andersen,

1996), no previous study has been identified that looks at whether schemas developed from television-viewing might also play a role in understanding new social situations.

This study provides experimental evidence that how one remembers and uses what he or she watches could be very important. To explain, if an individual were to watch just one romantic comedy, they may develop a character schema from this viewing that they may use to make inferences about a new romantic partner. If the character that inspired this person's schema was unrealistic, the inferences this person makes about their new romantic partner may be incorrect, and he or she might be disappointed when the new romantic partner fails to meet his or her expectations. A research program following schema transference methodologies similar to the one used in this study could lead to much more detailed and revelatory studies involving the effects of television character schemas. By making just a few adjustments to this methodology, future studies could better understand how individuals use television to make judgments about other people. Researchers could also determine whether television character schemas or significant other schemas are more influential in the inferences we make about other people. With this research, media literacy programs could develop more accurate explanations for why television-viewing can have negative effects on our social lives, and provide better guidance to viewers that could help reduce the negative effects of their media use.

Hypotheses 3a and 3b were not significant, but this finding is interesting. Previous research found close relationship schemas (i.e., more developed schemas) are more likely to be used to make inferences about strangers (Andersen & Cole, 1990). Therefore, this study hypothesized those who experienced parasocial interaction would be more likely to use their television personality schemas to make inferences about a peer because parasocial interaction should strengthen the connection between viewer and character leading to highly developed, easily accessible television personality schemas. One possible explanation for the null findings of hypothesis 3a and 3b may be that parasocial interaction may not lead to highly developed television character schemas. Horton and Wohl (1956) felt parasocial interactions, due to their mediated nature, may not provide enough information to develop strong schemas. It may also be possible television character schemas formed from parasocial interactions are so unique that the traits for these characters would not be transferred to any other person. For example, your schema for your mother is likely very specific. So specific that it may be unlikely that you would infer others' traits from your mother schema because no one else would be similar enough to cue your mother schema other than your mother herself. This possibility raises questions about how specific or abstract a relational schema may need to be in order to be transferred. Future studies should attempt to assess the level of abstractness of an individual's television character schema specificity might limit transference.

#### Limitations

The results of this study were encouraging, but several limitations need to be addressed. First, the sample size was significantly limited because severe weather led to university closings and less class time for the rest of the semester. Students were not as motivated by extra credit when they were required to attend both sessions outside of class. Larger sample sizes would lend more validity to the findings of this study, especially those for hypothesis 3a and 3b. The factor analysis performed only met the minimum sample size requirements and therefore may have returned better reliabilities than would be expected with a larger sample size.

Additionally, this study did not ask specifically for positive or negative personality traits during data gathering. This was decided because of time limitations and the possibility that participants would experience fatigue. In order to test hypotheses addressing the transference of affective information stored about television characters, it is important that researchers gather separate positive and negative personality traits about participants' favorite television characters. Doing so would also likely lead to a more complete description of participants' favorite television character schema.

#### Implications for Future Research

This study found experimental evidence that television character schemas may be used in social interactions to infer information about relatively unknown people's personalities. Understanding the fact that people may store information about their favorite television characters and use that information to make inferences about real people is both disturbing and encouraging for the mass communication discipline. It is disturbing because television characters are not always portrayed realistically (e.g., Holmes, 2007; Johnson & Holmes, 2009; Pardun, 2002). If we form expectations about behavioral and personality norms based on the sometimes quixotic television programming, then we may be disappointed to find real people do not often meet the idealistic standards of television. This could lead people to be dissatisfied with their real relationships (Baucom & Epstein, 1990). On a more encouraging note, the media offer diverse characters that could help people learn tolerance (e.g., Schiappa et al., 2005).

Several recommendations can be made for future studies wishing to further validate the findings of this study. First, more experimental control could be worked into the methodology. While having participants come to the lab to view programming may reduce experimental realism, this control could be beneficial for many reasons. Researchers could reduce distractions while viewing, control the types of characters and situations presented, and control the time between viewings and experimental sessions. Second, more diverse populations should be studied. While college students are convenient and cheap participants, it would be beneficial to

know whether individuals from other age groups and backgrounds experience schema transference from television to real life. Third, scales such as the Perceived Realism Scale (Potter, 1986) could be added to the first session so that researchers could test for interaction effects and further understand what variables may increase or decrease the likelihood that someone will use television character schemas to make inferences about real people.

Future studies should attempt to correct the limitations of this study and search for more meaningful applications for this research program. Instead of focusing on how media viewing habits or television programming should change, further study focused on how viewers store and use the information they see on television could further validate the importance of media literacy.

#### Footnotes

<sup>1</sup> Since the irrelevant adjectives given to the experimental participants were included merely to distract participants from guessing the purpose of the experiment, the responses to these descriptions were not included in the dependent measure. Including these responses when calculating the dependent variable would result in a test of mere memory, rather than schema transference. This is because the irrelevant adjectives are not considered to be central to the participants' favorite television character schema.

Also, control group responses included two sentences that were very similar. This was a problem because one of these sentences was used in the memory trial as a sentence that was not presented in the learning trial. The sentence, "He/She is average height" was likely misremembered in the memory trial because of its similarity to the sentence "He/She is average weight." Therefore, the control group memory trial responses to the sentence "He/She is average weight" was not included in the dependent variable.

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# Appendix A

# Irrelevant Adjectives from Anderson (1968)

Proud	Orderly	Studious
Lucky	Artistic	Modest
Daring	Positive	Decisive
Sentimental	Calm	Humble
Quick-witted	Moral	Curious
Serious	Casual	Romantic
Religious	Innocent	Bold
Fashionable	Conservative	Reserved
Comical	Shy	
Social	Unpredictable	

# Appendix B

# Audience Persona-Interaction (API) Scale (Auter & Palmgreen, 2000)

1.	I have the sar	ne qual	lities as		·				
	Totally agree	1	2	3	4	5	6	7	Totally disagree
2.	2. I have the same beliefs or attitudes as								
	Totally agree	1	2	3	4	5	6	7	Totally disagree
3.	I seem to hav	ve the s	ame pr	oblems	as		·		
	Totally agree	1	2	3	4	5	6	7	Totally disagree
4.	I can imagine	myself	f as		·				
	Totally agree	1	2	3	4	5	6	7	Totally disagree
5.	I can identify	with							
	Totally agree	1	2	3	4	5	6	7	Totally disagree
6.	I'd like to me	et		·					
	Totally agree	1	2	3	4	5	6	7	Totally disagree
7.	7. If appeared on another television program, I would watch that program.								
	Totally agree	1	2	3	4	5	6	7	Totally disagree
8.	I enjoy trying	to pree	dict wh	at		_would	do in th	ne show	
	Totally agree	1	2	3	4	5	6	7	Totally disagree
9.	9. I hope that achieves his or her goals in the shows that I watch.								
	Totally agree	1	2	3	4	5	6	7	Totally disagree
10	10. I care about what happens to								
	Totally agree	1	2	3	4	5	6	7	Totally disagree
11	11. I like hearing the voice of								
	Totally agree	1	2	3	4	5	6	7	Totally disagree
12	I wish I could handle problems as well as								
	Totally agree	1	2	3	4	5	6	7	Totally disagree
13. I like the way handles problems.									
	Totally agree	1	2	3	4	5	6	7	Totally disagree
14	4. I would like to be more like								
	Totally agree	1	2	3	4	5	6	7	Totally disagree
15	. I agreed with			mos	t of the	time.			
	Totally agree	1	2	3	4	5	6	7	Totally disagree

Table 1				
ANOVAs				
	df	F	η	p
Hypothesis 1	1	.075	.122	.785
Hypothesis 2	1	19.27***	.211	.000
Hypothesis 3a	1	.241	.003	.625
Hypothesis 3b	1	1.64	.023	.205
Manipulation check	1	37.36***	.342	.000
<i>Note:</i> *p < .05. **p <	.01. ***p <	< .001.		