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Predicting Relational Outcomes:  
An Investigation of Thin Slice Judgments in Speed Dating

Marian L. Houser  
Texas State University-San Marcos

Sean M. Horan  
West Virginia University

Lisa A. Furler  
Texas State University—San Marcos

Marian L. Houser (Ph.D., University of Tennessee) is Assistant Professor and Lisa A. Furler (MA, Texas State University-San Marcos) is a Student Development Specialist at Texas State University-San Marcos. Sean M. Horan (MA, Texas State University-San Marcos) is a doctoral student at West Virginia University.

Direct all future correspondence to Marian L. Houser, Department of Communication Studies, Texas State University-San Marcos, 601 University Drive, San Marcos, TX 78666, Email: mh53@txstate.edu, Phone: 512-245-3137, Fax: 512-245-3138.
Abstract

Many relational scholars suggest relational closeness may be determined during initial interaction (Berg & Clark, 1986; Duck, 1995). Speed dating (Deyo & Deyo, 2002) creates opportunities for rapid evaluations and thin slicing (Ambady, Bernieri, & Richeson, 2000) supports the notion that mere moments can predict relational outcomes and provides opportunities to understand relational components determining positive/negative assessments in speed-dating. Predicted outcome value (POV) offers a lens for understanding evaluations determining the most rewarding relationships (Sunnafrank, 1986). Actual speed dating participants (n=157) evaluated and provided descriptive rationale for their evaluations according to the valence of their predicted outcomes.
Introduction

Can a decision made in a few seconds be as strong as a decision taking weeks or even years? Most people would say no. However, others would claim these instant decisions are consistent with time-intensive contemplations. For example, one author writes “Decisions made very quickly can be every bit as good as decisions made cautiously and deliberately” (Gladwell, 2005, p. 14). This is a very bold claim from a book written for popular press, yet despite its mainstream nature, the powerful words written by Gladwell (2005) offer much to consider and carry significant empirical support. In fact, researchers suggest people can form accurate impressions from mere glimpses of behavior (Allport, 1937; Goffman, 1979). Recent research has referred to this phenomenon as thin slicing (Ambady, Bernieri, & Richeson, 2000). A thin slice is defined as: “a brief excerpt of expressive behavior sampled from the behavioral stream” (Ambady et al., 2000, p. 203). The aim of the present study was to investigate thin slicing and the ability to predict relational outcomes in a specific relational decision-making context: speed dating.

Born out of the desire to make Jewish dating easier, speed dating typically occurs in a round robin format with six to twelve possible dates lasting anywhere from three-to-eight minutes (Deyo & Deyo, 2002; Spear, 2005). The principle question driving this investigation was: What are indicators of positive or negative outcome predictions in a thin slice judgment, or the initial thirty seconds, of a speed date? This study is important for three key reasons. First, thin slicing has been unexplored by communication scholars, despite its direct relation to the discipline. Second, speed dating provides an entirely new investigative context for relational scholars. Finally, within this new context it is possible this heuristically provocative variable informs current relational communication theory.

Review of Literature

Speed Dating

Today’s fast-paced American lifestyle has forced new and creative methods for meeting potential romantic partners. Speed dating has become a matchmaking craze sweeping the country (Farouky and Smith, 2003). It has become a popular venue for today’s singles as it provides daters quick access to a large number of potential mates in a single evening. Speed dating has gained popularity in the United States and around the globe in places such as the United Kingdom, India, Australia, and Canada (Chen & Marr, 2005; Spear, 2005). It is very different from the typical bar scene and even online dating as up to twelve men and twelve women sign up for events based on specific criteria (i.e., age range, lifestyle, etc.) established by the dating organization. Participants typically gather in a restaurant armed with nametags and evaluation forms and pair up to begin dating. After six minutes (time varies with the dating organization) of conversation a bell rings and the men move on to the next table; women stay seated for their next date. Couples keep track of their 6-minute perceptions of each date on evaluation forms by recording thoughts and indicating whether they would like an opportunity to meet this person again. The speed dating coordinator later determines mutual interest and, if this is the case, shares email addresses with participants to enable a future meeting.

Rabbi Yaacov Deyo developed speed dating as a way for Jewish singles to date and to follow the principles underlying Jewish dating traditions (Deyo & Deyo, 2002). Since its
creation, companies like Cupid.com (one of the three largest speed dating companies in the world) host monthly events in over 100 U. S. cities with nearly 4,000 daters per month (Cupid.com/PreDating). Though research on this new dating environment is scant, commonalities among the attributes highly valued by participants have been found to exist. For example, after the allotted time (six-eight minutes) Kurzban and Weeden (2005) indicated specific physical appearance attributes (i.e., attractiveness, height, and body mass index) were positively correlated with date selection, while other attributes such as religion and education, initially indicated as important, revealed no correlation with selection. How participants develop criteria for matches and assess their respective value in six to eight minutes remains unknown. Could it be individuals need even less time to determine the positive or negative possibilities of a future relationship? Thin slicing research may provide the link to understanding partner selection and the eventual success of speed dating.

**Thin Slicing**

Thin slicing is not a new variable under investigation in the social sciences; however it has not always been examined under this title. Similar relational communication concepts may fall under the headings of “stereotype activation” (Banaji & Greenwald, 1994; Bodenhausen & Macrae, 1998; Lepore & Brown, 1997) “expectancy effects” (Burgoon & LePoire, 1993), or “self-fulfilling prophecies” (Jussim, 1991; Rosenthal, 1973). Contemporary research in thin slicing has been conceptualized and championed by Ambady (Ambady et al., 2000; Ambady, Conner, & Hallahan, 1999; Ambady & Gray, 2002; Ambady, LaPlante, Ngyuen, Rosenthal, Chaumenton, & Levinson, 2002; Ambady & Rosenthal, 1992, 1993) and typically explained as an experience based on verbal and nonverbal cues experienced in less than five minutes (Ambady et al., 2000). The most compelling aspect of the thin slice construct is the accuracy and reliability of the judgments made during these brief encounters (Ambady & Rosenthal, 1992).

Thin slice judgments have been examined in a variety of contexts. Research shows that strangers have been able to generate accurate personality judgments about extraversion, openness, and conscientiousness solely based on a brief viewing of strangers’ bedrooms and offices (Gosling, Jin Ko, Morris, & Mannarelli, 2002). Racial bias, for example, was accurately detected by black participants based on a twenty-second thin slice of nonverbal behavior (Richeson & Shelton, 2005). In another study involving thin slice video clips of homosexual and heterosexual men and women, participants were able to accurately identify the sexual orientation of targets (Berger, Hank, Rauzi, & Simkins, 1987).

Thin slicing has also been studied extensively within the education context. In a study of teacher’s differential treatment of students high and low in achievement, the students (unfamiliar with the teacher and pupils) were able to significantly identify a teacher’s differential behavior based on ten second clips of their nonverbal communication behavior. Moreover, these judgments matched evaluations of the teacher’s actual students (Babad, 2005). Another study investigated teachers’ nonverbal behaviors and expectancy effects by having participants view ten second clips of teachers talking to and about students with whom they had high and low expectations. Based on these thin slices, teachers were able to accurately judge negative affect toward low expectation students (Babad, Bernieri, & Rosenthal, 1989). Results of a study conducted in the college classroom revealed six-to-fifteen second silent video clips of teachers yielded accurate judgments from participants that were consistent with end of semester evaluations from the teachers’ actual students (Ambady & Rosenthal, 1993).
Researchers have also begun coding conversational thin slices to make predictions. Specifically, coding based on four conversational features in a negotiation context was predictive/indicative of negotiation outcomes (Curhan, Pentlad, Caneel, Eagle, & Martin, 2005). Perhaps the most well-known coding that could be incorporated within the concept of thin slicing was conducted by Gottman in the marital context (Carrere & Gottman, 1999; Gottman & Levenson, 1992). A most intriguing result of this programmatic research was the ability to accurately predict divorce over a six year period based on three minutes of a conversation (Carrere & Gottman, 1999).

Noting the reliability of thin slice judgments, scholars have also begun isolating certain mediums or channels to determine impact. Specifically, research has indicated people can form accurate judgments based on isolated mediums (Ambady et al, 2002; Frable, 1987; Linville, 1998). For example, Linville (1998) isolated the vocal channel of heterosexual and homosexual men and found participants were able to successfully identify sexual orientation based on 90 second vocal cues. A similar study found participants able to accurately determine surgeons’ placement in either a “claims” or “no-claims” malpractice category based on 40 seconds of hearing surgeons speak, while controlling for content (Ambady et al, 2002). Additional research appears to support the notion that visual and nonverbal communication channels are the most telling in developing accurate thin slice judgments (Grahe & Bernieri, 1999). The role these channels play in positive or negative outcomes in the speed dating context, however, is unknown. When individuals are facing a ticking clock, in a noisy, fast-paced “meet-and-greet” environment, can they comprehend their immediate perceptions? Does the thin slicing concept transfer to the speed dating context?

Theoretical Frame

Researchers have long explained that one of the most fundamental communication behaviors is the attempt to reduce uncertainty and sequentially increase relational predictability (Berger & Calabrese, 1975; Sunnafrank, 1986). The theory of predicted outcome value (POV) proposes that potential relational partners assess the outcome of a future relationship (Sunnafrank, 1986; 1990). In settings with multiple potential partners (i.e., speed dating) attempts are made to develop the most rewarding and cost effective relationship—excluding those less rewarding (Sunnafrank & Ramirez, 2004). This may be especially significant during a speed dating event when participants are encouraged to decide immediately whether or not to continue the interaction in the future.

Scholars have continued to support the possibility that relational closeness may be determined during initial interactions (Berg & Clark, 1986; Duck, 1995). Research on predicted outcomes (POV) and uncertainty reduction (URT) have revealed a reliance on rapid assessments during (and sometimes even prior to) initial communication (Sunnafrank & Ramirez, 2004). Other studies have tested POV (Sunnafrank, 1986) and reported the value of initial impressions in assessing costs/rewards of future interactions. Bippus, Kearney, Plax, and Brooks (2003) reported college students assessed the positive or negative rewards of extra class communication (ECC) with teachers. These initial evaluations led them to either seek or avoid out of class communication. Mottet (2000) reported knowing an individual’s sexual orientation in an initial encounter produced a negative POV and, perhaps even more revealing, men predicted significantly more negative outcome values than women. More recently initial POV among relational dyads in a basic communication course emerged as the primary predictor of attraction,
Thin Slice Judgments

POV remains an important theory in interpersonal communication as it helps explain and predict communication behavior. Sunnafrank’s program of research (1986, 1988, 1990) creates an understanding of the elements to which individuals attend in order to form the value impressions that lead to developing or avoiding future interactions. In this study, the theory of predicted outcome value may provide a lens for understanding the specific interpersonal attraction traits and characteristics advanced during thin slicing evaluations in speed dating. It will be important, therefore, to determine if mere moments allow enough opportunity to solidify positive or negative perceptions. Therefore, the following two research questions were created:

RQ1: What themes of interpersonal attraction emerge from thin slice judgments of participants in the speed dating environment?
RQ2: What thin slicing themes lead to positive or negative judgments?

Method

Data was collected from multiple speed dating events in two large southern cities over a six month period. The participants in this real sample of speed daters consisted of 157 participants (n=157) and included 82 men and 75 women ranging from 25 to 60 years of age (Male M=37; Female M=34). At these particular speed dating events, subjects participated in six minute dates. As is common with speed dating, all participants were initially assigned a number and each was supplied with an evaluation form where he/she could report impressions and request a subsequent date with his/her speed dating partner. These forms were filled out at the conclusion of each date.

As part of this study, prior to the sixth date of the evening a request was made for individuals to participate in the study. At this point, each person was instructed to make an initial 30 second introduction with their sixth speed dating partner. Once this happened, each person was asked to temporarily pause their date and move to another location in the room. Researchers handed each dater a brief form asking them to report three pieces of information regarding their 30 second impressions of the sixth date. This format was designed to gather participants’ thin slice judgments and, ultimately, what did or did not lead to initial attraction and future dating expectations. First, participants were asked to report on a closed-ended question: “How do you feel about this person you just met—positive or negative?” Second, participants were asked to provide open-ended qualitative responses as to why they described their responses as positive or negative. Finally, participants were asked to report their sex and age. All participants were initially informed the research was voluntary and signed a consent form. This form detailed their rights as human subjects, the purpose of the study, expected time requirements, assurance of anonymity, and contact information. The researchers obtained IRB approval, guarding the rights and safety of human research subjects.

Data was organized by sex and judgment valence, which ultimately led to the following four categories: male positive judgment of partner, male negative judgment of partner, female positive judgment of partner, and female negative judgment of partner. Qualitative responses were then coded in order to discover themes among the positive and negative responses. Thematic analysis (Glaser & Strauss, 1967; Owen, 1984) enabled researchers to inductively explore the emerging themes within the positive and negative categories as well as the
perceptions expressed by sex. Two coders were involved in the consistent comparative analysis of the themes emerging from the data (Glaser & Strauss, 1967; Strauss & Corbin, 1998). Once categorical agreement regarding the aforementioned classification scheme was achieved, coding subsequently took place by these same two (n=2) individuals. Intercoder agreement in this initial phase of data analysis achieved an acceptable outcome of .87 (Cohen, 1960). Following subsequent recommendations from Krippendorff (2004), intercoder reliability from this respective phase of coding was .86 (Scott, 1955). Finally, two (n=2) different coders who were blind to the study were solicited to further examine the overall reliability of the classification scheme. Average intercoder agreement and composite reliability from coding all categories of the classification scheme achieved an acceptable reliability of .90 (Scott, 1955).

**Results**

The thin slice responses were initially divided according to sex and valence of judgment. Of the 157 participants responding to the closed-ended question, the sample was divided as follows: male negative (n=9), female negative (n=18), male positive (n=62), female positive (n=63). Varied positive and negative responses were offered for the open-ended question, and some participants listed multiple descriptive responses to support their evaluations. All were included in the coding. The open-ended responses created the following values: male positive evaluation of partner (n=73), male negative evaluation of partner (n=9), female positive evaluation of partner (n=103), and female negative evaluation of partner (n=24).

Thematic analysis produced several themes within each evaluation category and are reported in Table 1. Male negative judgments of partner produced one major theme: attraction/attractiveness; though a second category of “no response provided” should also be considered. After the 30 second greeting, the attraction theme included things like: “overweight” and “not of an ethnicity I would date.” Female negative judgments of partners after 30 seconds revealed the following three themes: can’t provide a reason, no attraction, and negative qualities. “Can’t provide a reason” included things like “hard to say” and obvious blank responses. “No attraction” included things like: “not my type,” “not Caucasian,” and “too short.” The negative qualities after 30 seconds included things like “a bit jittery,” needed repeated responses,” and “self-centered.”

Male positive judgments of partners after 30 seconds included the following four themes: no reason developed, physical attraction, friendly, and positive qualities/behaviors. Frequencies for the positive categories are reported in Table 1. “No reason developed” included blank responses and statements like, “hard to say.” The “physical attraction” theme included statements such as “attractive,” “pretty,” and “cute.” “Friendly” included responses like “seems friendly” and “friendly.” The final theme, “positive qualities/behaviors” included behaviors descriptive of their female partners’ communication. These communication behaviors were divided into five sub-themes: nice, positive demeanor/personality, positive communication, fun, and other. The sub-theme “positive communication” included responses like “good communication,” “pleasant conversationalist” and “eye contact.” The sub-theme “nice” included responses like “very nice” and “polite.” “Positive demeanor/personality” included responses like “bubbly” and “because she is giggly.” The “other” sub-theme included comments such as “open-minded” and “straightforward.”

The positive female partner responses after 30 seconds revealed five separate themes. The frequencies for these themes are located in Table 1. The first theme was “attractive” and
included comments such as “nice looking” and “attractive.” The theme referencing their male partner’s “smile” included comments such as “nice smile,” “great smile,” and “friendly smile.” The “friendly” theme included “friendly” and “very friendly.” Statements for the theme “funny” were most often reported simply as “funny.” As with the male positive responses, the final 30 second theme for females, “positive qualities/demeanor,” was divided into three sub-themes: seems nice, positive communication, and positive qualities. The sub-theme “seems nice” explicitly included “seems nice.” “Positive communication” included responses most often referring to conversation skills and nonverbal communication behaviors. Lastly, “positive qualities” included comments such as “positive communication,” “nice looking,” and “attractive.”

Discussion

The aim of this investigation was two-fold. The first goal was to discover themes of interpersonal attraction emerging from thin slice judgments, or the first thirty seconds, of a speed date. This study provides a “jumping-off point” for research in this context as no research in this, or any other dating environment, has evaluated the ability of individuals to determine the valence and rationale of perceptions after only 30 seconds. Secondly, in order to predict the future outcome value (POV) of the speed dating relationship it was important to uncover the particular themes leading to positive or negative evaluations. In other words, what are the essential elements determining relational prospects in an environment where single individuals are forced to come to rapid conclusions of partners while being timed and observed by a room full of strangers? This new matchmaking technique is relatively unexplored by relational scholars, thus, little is known in regard to the communication behaviors males and females value in this particular dating context. POV proposes that potential relational partners assess the outcome of a future relationship (Sunnafrank, 1986; 1990). If individuals in the speed dating environment are expected to decide, in brief moments, the most rewarding and cost effective relationship (Sunnafrank & Ramirez, 2004), what are the primary indicators? The emerging thin slice themes in this study could be especially revealing for relational researchers as attraction indicators and dating morph into new and different forms.

Lack of attraction or negative physical qualities were the primary drivers of both female and male negative judgments, though females reported nearly three times the negative evaluations compared to males. This may indicate female speed daters are quicker to note male negative characteristics, are more critical, or perhaps enter the environment with more specific and heightened standards. With the difference in these results, males could be perceived as more open-minded or at least slower to address the negative physical characteristics. At least it does not appear to readily occur in 30 seconds. However, an important element to note is that “attractiveness” was the only negative category emerging for males, suggesting this as the primary indicator of their negative thin slice judgment. They latch onto the more superficial characteristics when perceptions are negative in the first 30 seconds.

On the other hand, two major similarities for positive judgments emerged for males and females. Both sexes were nearly identical in their positive evaluations of the opposite sexes’ physical attractiveness and positive behavior and demeanor. In fact, both groups stated positive communication behaviors such as good communication skills, acting nice, and being nonverbally responsive were highly valued and necessary for positive prospective dates. This could be considered a bonus for communication scholars when after a mere 30 seconds the most positive and expected characteristics were communication-based. Though both reported positive evaluations of physical attractiveness, women were much more specific in detailing their positive judgments.

Table 1: Male and Female Positive and Negative Speed Dating Themes

<table>
<thead>
<tr>
<th>Positive</th>
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<tbody>
<tr>
<td></td>
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Male (n=73)

<table>
<thead>
<tr>
<th>Positive Communication Behaviors – 33</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seems/Talks Nice – 10</td>
</tr>
<tr>
<td>Good Demeanor/Personality – 8</td>
</tr>
<tr>
<td>Good Communication – 8</td>
</tr>
<tr>
<td>Seems Fun – 5</td>
</tr>
<tr>
<td>Other – 2</td>
</tr>
<tr>
<td>Physical Attraction – 18</td>
</tr>
<tr>
<td>Attractive – 5</td>
</tr>
<tr>
<td>Pretty – 5</td>
</tr>
<tr>
<td>Cute – 2</td>
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<tr>
<td>Other – 6</td>
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<tr>
<td>Friendly – 13</td>
</tr>
<tr>
<td>Friendly Attitude – 10</td>
</tr>
<tr>
<td>Friendly Face – 1</td>
</tr>
<tr>
<td>Seems Friendly – 2</td>
</tr>
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</table>

Female (n=103)

<table>
<thead>
<tr>
<th>Positive Communication Behaviors – 43</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive Personality Qualities – 22</td>
</tr>
<tr>
<td>Good Communication – 14</td>
</tr>
<tr>
<td>Seems/Talks Nice – 7</td>
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<tr>
<td>Physical Attraction – 16</td>
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<tr>
<td>Attractive – 2</td>
</tr>
<tr>
<td>Clean Cut – 2</td>
</tr>
<tr>
<td>Pretty Eyes – 2</td>
</tr>
<tr>
<td>Pleasant Face – 1</td>
</tr>
<tr>
<td>Tall – 1</td>
</tr>
<tr>
<td>Like His Black Hair – 1</td>
</tr>
<tr>
<td>Neatly Groomed – 1</td>
</tr>
<tr>
<td>Handsome – 1</td>
</tr>
<tr>
<td>Kind of Cute – 1</td>
</tr>
<tr>
<td>Stylish Clothing – 1</td>
</tr>
<tr>
<td>Smile – 23</td>
</tr>
<tr>
<td>Great, Cute, Nice Smile – 22</td>
</tr>
<tr>
<td>Nervous, but Warm Smile – 1</td>
</tr>
<tr>
<td>Friendly – 12</td>
</tr>
<tr>
<td>Funny – 6</td>
</tr>
<tr>
<td>Funny – 4</td>
</tr>
<tr>
<td>Sense of Humor – 1</td>
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<tr>
<td>Wit – 1</td>
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</tbody>
</table>

Negative

Male (n=9)

<table>
<thead>
<tr>
<th>Attraction – 8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight – 2</td>
</tr>
<tr>
<td>Race/Ethnicity – 2</td>
</tr>
<tr>
<td>Not Attracted to Them – 4</td>
</tr>
</tbody>
</table>

Female (n=24)

<table>
<thead>
<tr>
<th>Attraction – 12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Appearance – 5</td>
</tr>
<tr>
<td>Not My Type – 5</td>
</tr>
<tr>
<td>Other – 2</td>
</tr>
<tr>
<td>Negative Qualities – 9</td>
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<tr>
<td>Negative Personality – 5</td>
</tr>
<tr>
<td>Negative Communication Skills – 3</td>
</tr>
<tr>
<td>Other - 1</td>
</tr>
</tbody>
</table>

qualities” included responses like “nice demeanor,” “good energy,” and “good personality.” The abundance of the positive themes after the 30 second thin slice was readily apparent.

attractiveness characteristics. Men were basic, with limited descriptors such as “cute” and “pretty,” while women specified things like “clean cut,” “stylish clothing,” “nice eyes,” and
“neatly groomed.” In regard to specific attractiveness elements, it could be important to recognize what women focus on in 30 seconds. These very specific elements and criteria could prove useful to dating agencies offering advice to those hoping to have successful speed dating experiences.

Both men and women revealed “friendliness” as a valuable positive personal characteristic, but women especially reported an appreciation for a great “smile” from their male speed dating partners. As this may even fall under a dual heading of friendliness and attractiveness, in future studies it might be helpful to determine just how women classify a “great smile.” It appears, by the varied “smile descriptors” they may receive differential interpretations. In fact women reported a “cute smile,” “friendly smile,” and a “warm, accepting smile” as positive predictors in the first 30 seconds of their dates. This also suggests it is an important immediacy behavior (Mehrabian, 1971) and definitely an initial attraction criterion for females.

Overall, there were many more positive judgments across the sexes, suggesting a possible halo effect for daters attending speed dating events. It may be that the fast-paced, close environment encourages more positive responses due to “expectancy effects” (Burgoon & LePoire, 1993), or “self-fulfilling prophecies” (Jussim, 1991; Rosenthal, 1973) for the dating experience. Daters could, in fact, feel pressured to be more approving as 12 sets of eyes are upon them in a short time span. Another possibility could be the circumstances that led them to speed date in the first place. Many daters expressed to the researchers in the current study that they could “not believe they were doing this” and considered it their “last hope for getting a date” as their hectic lives allowed little time for socializing. The possibility of this “situational pressure” could alter many of the commonly accepted elements (e.g., task, social, and physical) of interpersonal attraction (McCroskey & McCain, 1974) that predict relational outcome values.

On the other hand, the fact that more positive evaluations of prospective dates emerged could be an indicator of the type of person engaging in speed dating. Could this be a means of last resort dating for individuals who have no time to socialize via more “normal” dating (e.g., parties, blind dates, clubs, etc.)? Might these participants be inclined to overlook many questionable or negative characteristics for fear of being alone or, at least, leaving with no future prospects? If this is the case, is the predicted outcome value useful or even assessable? Could desperation overrule logical thought processes? These are certainly important questions to consider in this new dating context if we hope to discover evaluative criteria predictive of future relationships.

This study offers initial insight into what attracts males and females to one another in a new dating realm and within the thin slicing frame. Members of the opposite sex meet briefly in a noisy, fast-paced environment, but does speed dating afford enough time to arrive at a well-developed decision—to carefully predict the valence of their date? This study evaluated the 30 second thin slice judgments of individuals to determine the predominant elements of attraction leading to positive dating prospects. The greatest value was placed on positive responses describing behavioral and communication characteristics and revealing social traits as emerging more frequently. Elements of physical attractiveness were also positively evaluated by both sexes, though women were enamored even more with the male smile. The physical components of each sex were also the primary indicators of negative responses. This is hardly surprising. One can expect adverse responses toward those who are overweight, of another race, or who otherwise exhibit unattractive physical characteristics (Kleinke & Kahn, 1980; Peretti & Abplanalp, 2004).
An important area for future research would be to compare these findings to measures of social and physical attraction (McCroskey, McCroskey, & Richmond, 2006) after six minutes in the speed dating context to see if the assigned valence is maintained over time. Perhaps other elements of attraction, such as task components, emerge later in the dating experience. Homophily, or similarity between couples may also play a role over a longer period of time. Thirty seconds is hardly enough time to establish background or attitude similarities. However, thin slicing research would suggest quickly made decisions are often as accurate, valuable, and predictive as cautious and deliberately made ones (Ambady & Rosenthal, 1992; Gladwell, 2005). Perhaps these findings, then, call into question the value of careful evaluations of attraction and homophily when individuals need only brief glimpses to form their impressions.

However, the execution of the present study may create certain comparative limitations. Participants, for example could feel a certain predisposition to respond similarly at 30 seconds and six minutes in order to remain consistent. As they were forced to draw a positive or negative conclusion after 30 seconds, perhaps they would feel a sense of dissonance (Festinger, 1957) if judgments were altered even after getting to know the other person better. Another possible limitation to the thin slice evaluation may have occurred due to the close proximity of the individual during the assessment. Participants were asked to greet their sixth date of the evening and then move a short distance from this location to complete the thin slice evaluation form. They may have felt self-conscious if they were evaluating their dating partner negatively—afraid their responses would be detected. This may have prevented completely honest assessments. Speed dating is a new matchmaking concept creating fertile ground for relational research. Participants are not left on their own to determine who to talk to, where, and for how long. They are carefully guided through the “dating” process and expected to arrive at future dating decisions by the end of an evening. This unorthodox dating concept begs for more research to determine if the interpersonal attraction elements long studied and evaluated continue to be predictors of relational outcome value in this environment. If, as presented in this study, initial communication behaviors such as smiling, good conversational and greeting skills, and nonverbal responses are essential indicators of future relational opportunities, then this should be the focus for singles. Looks may be important, but perhaps presentational skills play a more valuable role in today’s more creative dating environment.
References


Northwestern.
Cupid.com/PreDating. (n.d.). *If you have questions...we have answers.* Retrieved April 10, 2005, from http://pre-dating.com/faq.html


Cultural Differences in the Effects of Inequity on Coworker Friendships

Catherine Y. Kingsley Westerman
KINGSL17@msu.edu
Tel. (517) 355-3329

Hee Sun Park
heesun@msu.edu
Tel. (517) 355-3480

Hye-Eun Lee
leehyeeu@msu.edu
Tel. (517) 353-0887

Department of Communication
Michigan State University
East Lansing, MI 48824
Fax (517) 432-1192

Catherine Y. Kingsley (M.A., Michigan State University, 2004) and Hye-Eun Lee (M.A., Michigan State University, 2005) are doctoral students in the department of Communication at Michigan State University, where Hee Sun Park (Ph.D., University of California at Santa Barbara, 2003) is an assistant professor. For correspondence, please contact the first author, Catherine Y. Kingsley at KINGSL17@msu.edu.
Abstract

Americans and Koreans were compared on their responses to inequity. Whether they would be likely to do nothing or terminate the relationship was of interest, along with their level of satisfaction with different types of inequity. Koreans showed a greater reduction in satisfaction in relationships with inequity in the social dimension than did Americans. Koreans and Americans were similar in their satisfaction reduction with inequity in the task dimension. Culture interacted with type of inequity such that Koreans showed a greater decrease in satisfaction in overrewarding relationships than Americans but Koreans’ and Americans’ decrease in satisfaction did not differ for underrewarding relationships. In addition, Americans had less intent to do nothing (i.e., more intent to do something) about the relationship with inequity in the task dimension than Koreans whereas no difference was found between Koreans and Americans for social dimension. Koreans had greater intent to do nothing (i.e., less intent to do something) than Americans when underrewarded, but no difference was evident between Koreans and Americans when overrewarded. Willingness to terminate was not strongly endorsed by any participant.
Introduction

Imagine two individuals, Susan in the U.S. and Young Hee in Korea. Each has to work with her respective coworkers at her respective company on projects requiring multiple personnel. A universal organizational issue is the conflict between overachievers and individuals who cannot complete their work on time, are unavailable, or cannot complete quality work. Differences in ability or motivation often lead to the problem of inequity in coworker relationships and friendships, or in blended friendships, which involve interaction both at work and outside of work (Bridge & Baxter, 1992). The responses to inequity may differ across culture, as a function of the type of inequity, and as a function of the dimension in which the inequity lies (task vs. social). Susan and Young Hee may respond differently to their coworkers depending on whether they are overachievers or slackers, their culture, and whether they experience inequity at work or outside of work.

The current research examines cultural differences in responses to two inequity types (overbenefit [i.e., overreward] and underbenefit [i.e., underreward]) in the task versus social dimensions of a coworker friendship. Central to our interest in blended friendships in the U.S. and Korea is the question of how members of the relationships will respond in the face of inequity. What will Susan and Young Hee do in the face of inequity in their blended friendships? Will each choose to live with the inequity (i.e., do nothing) or terminate the relationship? How satisfied will they be with the equitable versus the inequitable friendships? This study focuses on less common responses to inequity in blended friendships: termination of the relationship, doing nothing, relational satisfaction of members of inequitable blended friendships.

Suggestions of answers to the above questions can be gleaned from literature on the differences between U.S. and Korean cultures, cross-cultural research on equity, and the basic tenets of Equity Theory. The following sections provide a brief review of these areas and advance hypotheses and research questions.

Comparison of U.S. and Korean Cultures

Confucianism, a philosophy of human nature considering proper human relationships as the basis of society, has had a profound impact on Korea (Yum, 2000). Confucianism is said to influence the culture of Korean workplaces as well (Chen & Chung, 1994; Kim, 1994). In Korean workplaces, individual goals and achievements are not valued as much as group goals and interpersonal harmony. Workers with strong social networks are valued over those with strong individual abilities (Yoon & Lim, 1999); loyalty, group belonging, and fellowship in the workplace are also highly valued. In addition, Korean managers and workers hold strong beliefs in organizational paternalism and solidarity (Kim, 1994). Spending time together outside work for drinking or other social activities is very common in Korean workplaces. In sum, Korean workplaces attempt to create a family-style climate and motivate their employees to behave as a family. This includes both providing social support for and maintaining interpersonal harmony with coworkers (Kim & Min, 1999).

Although Korea is usually considered to have cultural characteristics of collectivism, cross-cultural research does not always show Korea as collectivistic and America as individualistic. A meta-analysis has shown that Koreans are less individualistic than Americans, but not necessarily more collectivistic (Oyserman, Coon, & Kemmelmeier, 2002). Further, economic crises and Westernization in Korea have caused changes that may indicate Koreans
will behave similarly to Americans. They may become more interested in individual goals, as Americans are. Also, they may accept use of the equity norm in their workplaces. For example, pay-for-performance systems (equity-based) have been well received in Korean workplaces (Chang, 2003). Further, as the individual performance of Korean workers becomes more important for careers in Korea, these workers may also become more interested in receiving rewards proportional to their effort (Lee, 1998-99). When previously compared, Koreans and Americans have displayed rather small differences (e.g., Gudykunst et al., 1996; Leung & Park, 1986). Given that Korean workplace culture seems to be evolving, previous comparisons may no longer be completely accurate.

Evidently, neither researchers nor their data agree upon characteristics of the Korean workplace. In a recent study, preferred information-seeking strategies of Koreans did not differ much from those of Americans (e.g., Shin, Park, & Han, 2004). However, compared to Americans, Koreans were more concerned with behavioral outcomes that can affect others and other people’s expectations (e.g., Park & Levine, 1999). In sum, it is not easy to give a cookie-cutter description of these two cultures as completely similar or different; each has its own evolving “personality,” and both bear investigation.

**Equity, Culture, and Relationship Dimension**

Little research has been done to examine cultural differences in responses to inequity in relationships. The majority of research examining cultural differences in equity has focused on comparing equity versus equality as a preferred reward allocation rule. In other words, most cross-cultural research have investigated (in)equity as an outcome, rather than as a cause for relational outcomes. Past research does not shed much light on how Koreans and Americans would react to overreward and underreward situations. Furthermore, cross-cultural research findings on equity (and/or equality) as a reward allocation rule have been equivocal with regard to cultural differences in preference for the equity norm in different relationship dimensions.

It has been suggested that adherence to the equity norm can vary with the types of goals (the goals of economic productivity versus pleasant social relations, Deutsch, 1975; Katz & Kahn, 1978) and relationship types (ingroup vs. outgroup members, Leung, 1988) that people prioritize. When the equality norm is used for reward allocation, the focus is on equal distribution of rewards, regardless of each individual’s input amount. If, for example, regardless of the fact that Jane contributed 20% and John 80%, both Jane and John receive 50% of the output, the equality rule is being used. With the equity norm, however, to create equity, the amount of reward must be proportional to the amount contributed and that proportion must be equal across partners. According to an equity orientation, in the previous example Jane was being overrewarded and John was being underrewarded. If the equity rule was used to create an equitable distribution, Jane would receive 20% of the output and John would receive 80% of the output, creating a ratio of 1:1 for each member of the team.

In situations focused on productivity, both Koreans and Americans were more likely to endorse the equity rule, but in situations focused on social maintenance (harmony), both were more likely to prefer the equality rule (Leung & Park, 1986). In the U.S., where people are considered individualistic and economically oriented (rather than attuned to social harmony), equality, rather than equity, is a preferred allocation rule in some situations. Specifically, in situations involving high interdependence and solidarity goals, Americans prefer the equality rule (Chen, Meindl, & Hui, 1998). Further, those Americans higher in collectivism have less
positive preferences for the equity rule (Ramamoorthy & Carroll, 1998). Endorsement of a given allocation rule (equity/equality) clearly is not completely correlated with culture.

Understandably, strict adherence to the equity rule might seem less agreeable among friends, where it might be more palatable to maintain relationships than to make sure the effort to reward ratio is just right. On the other hand, for different types of relationships, it may seem more prudent to ensure that each person receives an amount equivalent to what he or she put in (equity). Leung (1988) indicates that people in collectivistic cultures use the equality rule for in-group members and the equity rule for out-group members. Hui, Triandis, and Yee (1991) found that high-performing Chinese participants were more likely to use the equality rule with their friends than their coworkers, and low-performing participants were more likely to use the equity rule, allocating rewards proportionally. Leung and Bond (1984) found that Chinese participants preferred an allocator who used the equality rule with friends (in-group members). In addition, Koreans rated individuals using the equality principle as more likable, friendlier, and warmer than did Americans (Leung & Park, 1986). These findings seem to indicate that Koreans may be less concerned with an equitable ratio of inputs and outputs in social relationships than in task relationships.

Generally speaking, people respond differently to overreward and underreward whether the inequity occurs in social relationships (Sprecher, 1992) or task relationships (Leventhal & Bergman, 1969). How those responses differ as a function of social and task dimensions and in different cultures remains to be seen. Empirical evidence on cross-cultural differences in reward allocation in a group setting suggests that the effect of culture on responses to inequity does not seem to be a function of task and social aspects of inequity. For example, for both social and task situations, Hong Kong Chinese preferred equal reward distribution more strongly than Americans did (Bond, Leung, & Wan, 1982) and in another study, people from the U.S., Korea, and Japan showed a similar pattern in their preferences for giving rewards (Kim, Park, & Suzuki, 1990). In general, the expected cultural differences in responses to social and task contributions were not observed. However, overall, Koreans were more generous with giving social rewards (i.e., willingness to extend the relationship to other situations such as friendship, working partners in other projects, etc.) than were Americans (Kim et al., 1990).

Responses to Inequity

**Relational satisfaction.** Walster, Berscheid, and Walster (1973) define an equitable relationship as one in which either the participant or an outside observer perceives all participants to have equal relative outcomes. Equal relative outcomes occur when the relational partners possess equal ratios of inputs to outcomes. Both inputs (e.g., assets, liabilities) and outputs (e.g., rewards, costs) can be positive or negative. Underreward occurs when a participant in the relationship contributes less than his or her partner while receiving equal or more rewards; overreward occurs when a participant in the relationship contributes more than his or her partner while receiving equal or fewer rewards.

Responses to each type of inequity may differ, given the different connotations of being advantaged versus disadvantaged in a relationship. In some studies, underreward was positively related to relationship uncertainty and dissatisfaction, while overreward was not (e.g., Dainton, 2003; Sprecher, 2001). Hegtvedt (1990) found that overrewarded subjects were the least distressed, followed by equitably treated subjects, and finally underrewarded subjects, who
experienced the most distress. This indicates a difference in the strength of experienced distress between underrewarded and overrewarded subjects.

Despite this difference, either type of inequity creates discomfort in those experiencing it (Walster et al., 1973), so it seems likely that satisfaction would be impacted by inequity. Previous research has shown that inequity is negatively related to satisfaction in various relationships. For example, inequitably treated individuals, compared to those treated equitably, have less satisfaction in close friendships (Medvene, Teal, & Slavich, 2000), dating relationships (Dainton, 2003; Sprecher, 2001), marriage (Utne, Hatfield, Traupmann, & Greenberger, 1984; Van Yperen & Buunk, 1990), and parental relationships with children (Vogl-Bauer, Kalbfleisch, & Beatty, 1999). Thus, when experiencing inequity in coworker friendship, it is expected that people will show less satisfaction than when the friendship is equitable. For the two types of inequity, overreward versus underreward, the amount of decrease in satisfaction from equitable relationship to inequitable relationship may differ. Assuming an association of underreward with disadvantage and overreward with advantage, a greater decrease in relationship satisfaction may be observed for underreward than for overreward. Thus, the first hypothesis predicts the effects of two types of inequity on relationship satisfaction with a coworker friend.

H1: When comparing equitable and inequitable relationships, people will show a greater decrease in satisfaction for underreward than for overreward.

It is questioned if Koreans and Americans would react differently to inequity in task versus social dimensions. According to Oyserman et al. (2002), Koreans are less individualistic than Americans. If we assume that Americans are very individualistic in the workplace, we may speculate that Koreans would be more comfortable with inequity in the task dimension than Americans, who expect a winner-take-all attitude in the workplace. Considering westernization and the increasing emphasis on individual achievement in Korean workplaces (Chang, 2003; Lee, 1998-99), however, Koreans may not differ much from Americans. Similarly, for the social dimension of a coworker friendship, Koreans and Americans may or may not differ, as the rules of social interaction in the two cultures might be more or less similar than different. Thus, the following research questions are posed:

RQ 1: Will Koreans and Americans differ in satisfaction level change for overreward versus underreward relationships?
RQ 2: Will Koreans’ and Americans’ satisfaction level change for inequity (overreward vs. underreward) vary with the relationship dimension (task vs. social) in which inequity occurs?

Intent to Do Nothing and Willingness to Terminate

Equity theory says inequity in relationships means discomfort for those in the relationship. This discomfort may result in various restoration attempts, including taking action, psychological restoration of equity, terminating the relationship (Walster et al., 1973), or doing nothing (Sprecher, 1992). Relationship termination and doing nothing about the inequity are two of the more extreme ways of dealing with inequity.

Doing nothing is the opposite of terminating; it involves simply ignoring the inequity and continuing the relationship. Because most people would try to restore equity in some way, even if it is not physically evident (they may psychologically resolve inequity), it is expected that in an equitable relationship, people have higher intention to do nothing, while in inequitable relationships, people have lower intention to do nothing. Further, people’s intention to do
nothing may vary with inequity types. That is, people’ intention to do nothing may differ between overreward and underreward. Given that Korean workplaces encourage a family atmosphere of social support, Koreans may be likely to overlook some inequity and do nothing. However, the changes in Korean workplaces (e.g., Westernization, more emphasis on individuals) lead to a less clear conclusion: Koreans may respond similarly to Americans. Koreans’ versus Americans’ intentions cannot be easily predicted here. Thus, research questions are advanced.

RQ 3: Comparing equitable and inequitable relationships, will Koreans and Americans differ in the amount of change in intent to do nothing about overrewarding versus underrewarding relationships?

RQ 4: Will Koreans’ and Americans’ changes in intent to do nothing about inequitable relationships (overreward vs. underreward) vary with the relationship dimension (task vs. social) in which inequity occurs?

Inequitably treated partners are less likely to engage in relationship maintenance than equitably treated partners (Canary & Stafford, 1992, 1993, 2001; Dainton, 2003; Messman, Canary, & Hause, 2000; Vogl-Bauer et al., 1999). That is, those in inequitable situations may be less interested in continuing their relationships (termination). Regarding cultural differences on willingness to terminate inequitable relationships, once again research questions, rather than hypotheses, are advanced. The Korean “family” orientation leads us to believe that Koreans would be less likely to terminate, but the Korean workplace can also be individually focused, making predictions difficult.

RQ 5: Comparing equitable and inequitable relationships, will Koreans and Americans differ in their willingness to terminate overreward versus underreward relationships?

RQ 6: Will Koreans’ and Americans’ willingness to terminate inequitable relationships (overreward vs. underreward) vary with the relationship dimension (task vs. social) in which inequity occurs?

Method

Participants

The U.S. sample consisted of 341 participants including 288 undergraduates and 53 working adults. The sample included 39.6 % males, 58.4 % females, and 2.1 % who did not indicate their sex. Of the 341 participants, 78.6 % were Caucasian, 7.5 % were African-American, 3.6 % were Asian American, 2.7 % were Hispanic, 0.9 % were Pacific Islander, 0.3 % were Native American, 2.4 % were Mixed, and 2.1 % were other ethnicities (fifteen did not indicate an ethnicity). Ages ranged from 18 to 62 years old ($M = 24.48$, $SD = 8.31$), with 57.3 % of the participants between the ages of 20 and 22. Nine participants did not denote their ages. When asked if they have a person who they identify as both a friend and coworker, in other words, a blended friend, 80.1 % of the 341 participants indicated that they did.

The Korean sample was collected in Korea and included 145 undergraduate students and 136 employed adults.¹ Here, ages ranged from 19 to 59 years old ($M = 28.1$, $SD = 7.56$), and

¹ Because many Korean undergraduate students do not have as much working experiences as U.S. undergraduate students, a greater number of Korean employed adults, compared to U.S. employed adults, were recruited to
more females ($n = 169$) than males ($n = 104$) participated (8 neglected to denote their gender). Of 172 participants who answered a question about whether they had a blended friend, 84.88% indicated that they did.

**Design.** The design was a 2 (national culture: U.S. and Korea) $\times$ 2 (equity level: underreward and overreward) $\times$ 2 (relationship dimension: inequity in task and social dimensions). The questionnaires were originally written in English. Four Koreans fluent in English translated the vignettes and scales for the current study directly from the original instruments. Another several Koreans checked the translated version for its fluency and semantic meaning in Korean.

Participants from each culture received the questionnaires in their native language. All subjects initially received an equitable vignette followed by scales to establish a baseline for their responses to an equitable relationship. Following that was an inequitable (either overreward or underreward, not both) vignette, which was also followed by various scales. In total, each participant responded to two vignettes, with the equitable version first, followed by an inequitable depiction of the blended friendship. Each vignette described a relationship between the participant and a fictional, gender-neutral friend (Chris in the English version and Junghyun in the Korean version), who were portrayed as organizational peers. English versions of all vignettes are listed in Appendix A.

Equity was manipulated in three ways: by setting up the participant to receive less benefit than Chris (Junghyun in Korean version), more benefit than Chris or about the same benefit as Chris. In the underrewarded condition, participants read a vignette containing this sentence: “However, sometimes Chris can’t seem to get Chris’ part done and you end up doing the entire report. You never complain about helping Chris, but simply do the report and move on.” In the overrewarded condition, the vignette included, “However, sometimes you can’t seem to get your part done and Chris ends up doing the entire report. Chris never complains about helping you, but simply does the report and moves on.”

Relationship dimension was manipulated by setting the inequity in either the task dimension (e.g., projects in which the work was unevenly distributed) or in the social dimension (e.g., unequal sharing of the driving responsibilities for a shared hobby outside of work). The social dimension manipulation included this section: “Outside of work, you and Chris rollerblade together. You often spend weekends rollerblading together, and you also do other things together, like going out for a drink after work.” The task dimension manipulation included this section: “At work, you and Chris must jointly come up with a monthly budget report for your company’s supply closet. You are supposed to do an inventory of everything in the supply closet and Chris is supposed to do the math to figure out what needs to be replaced and how much the replacements will cost.” Relationship dimension was held constant across the equitable and inequitable vignettes given to each participant, so that a participant may have received Social-Equitable, Social-Overreward but not Task-Equitable, Social-Underreward.

**Procedure.** Undergraduate student participants completed the questionnaire in their regularly scheduled class times and working adults completed the questionnaire either in their workplaces or their homes. Undergraduate students received class or extra credit in exchange for their participation; working adults were thanked, but received no other compensation. Instructors collected undergraduate students’ completed questionnaires and gave them to one of

substantiate similarity between the Korean and U.S. samples for the topic (i.e., coworker friendship) of the current study.
the researchers (personally or by mail) and working adults mailed their completed questionnaires to the researchers.

**Measurement**

Participants read the equitable version of the vignettes and then completed scales for satisfaction with the equitable relationship. The satisfaction scale as well as scales for intent to do nothing and willingness to terminate all followed the inequitable vignette. Scales measuring realism and fairness of the vignettes were administered following both inequitable and equitable vignettes. All scales were a Likert-type format ranging from 1 (strongly disagree) to 7 (strongly agree). All items and their reliabilities are listed in Table 1. Table 2 shows correlations among satisfaction with the inequitable relationships, intent to do nothing about the inequitable relationships, and willingness to terminate the inequitable relationships.

**Table 1: Measurement Items and Reliabilities.**

<table>
<thead>
<tr>
<th>Vignettes</th>
<th>U.S.</th>
<th>Korea</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Realism</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A friendship like this could develop in real life.</td>
<td>Equitable</td>
<td>.91</td>
</tr>
<tr>
<td>It is possible to have a coworker like Chris.</td>
<td>Inequitable</td>
<td>.84</td>
</tr>
<tr>
<td>I can imagine being in a friendship like this one.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The relationship with Chris could happen in real life.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Fairness</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chris is taking advantage of me.</td>
<td>Equitable</td>
<td>.81</td>
</tr>
<tr>
<td>I am getting more benefits from the relationship.*</td>
<td>Underreward</td>
<td>.83</td>
</tr>
<tr>
<td>Chris and I both get a similar amount of benefits from the relationship.*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am taking advantage of Chris.</td>
<td>Overreward</td>
<td>.82</td>
</tr>
<tr>
<td>Chris is getting more benefits from the relationship.*</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Satisfaction</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am very satisfied with this relationship.</td>
<td>Equitable</td>
<td>.85</td>
</tr>
<tr>
<td>This relationship is good compared to most.</td>
<td>Inequitable</td>
<td>.79</td>
</tr>
<tr>
<td>Given the situation described, I would wish I hadn’t gotten in this relationship.* (recoded)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>This relationship meets my expectations for a friendship.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I care for Chris very much.*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>There are no problems in this relationship.‡ (recoded)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Do Nothing</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I would not change anything about this relationship</td>
<td>Inequitable</td>
<td>.89</td>
</tr>
<tr>
<td>I would let the relationship ride as is for a while.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I would wait and see what happens.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
4. I would leave it alone.**
5. Confrontation is not worth the risk.**

Termination
1. I would end the friendship.
2. I would stop working with Chris.
3. I would quit my job.
4. I would ask for a transfer.
5. I would stop spending time with Chris outside of work.†

† omitted from US survey (inequitable)
‡ omitted from US survey (both)
* omitted from Korean survey (both)
** omitted from Korean survey (equitable)

Confirmatory factor analysis (CFA) was conducted separately for American and Korean samples for each scale. Items that did not contribute to unidimensionality of their relevant scales were removed as indicated in Table 1. Manipulations checks were completed on perceptions of realism and fairness of the vignettes for both data sets.

Table 2: Correlations among satisfaction with, preference for doing nothing about, and willingness to terminate the inequitable relationships.

<table>
<thead>
<tr>
<th>Culture</th>
<th>Inequity Type</th>
<th>Relational Dimension</th>
<th>Satisfaction</th>
<th>Doing Nothing</th>
</tr>
</thead>
<tbody>
<tr>
<td>US</td>
<td>Underreward</td>
<td>Social</td>
<td>Doing Nothing</td>
<td>-.35**</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Task</td>
<td>Doing Nothing</td>
<td>.45**</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Termination</td>
<td>-.25*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Social</td>
<td>Doing Nothing</td>
<td>.55**</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Task</td>
<td>Doing Nothing</td>
<td>.52**</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Termination</td>
<td>.14</td>
</tr>
<tr>
<td>Overreward</td>
<td>Underreward</td>
<td>Social</td>
<td>Doing Nothing</td>
<td>.38**</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Task</td>
<td>Doing Nothing</td>
<td>.38**</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Termination</td>
<td>-.03</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Social</td>
<td>Doing Nothing</td>
<td>.45**</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Task</td>
<td>Doing Nothing</td>
<td>.24*</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Termination</td>
<td>.38**</td>
</tr>
</tbody>
</table>

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

Manipulation Check

Realism. A one-sample t-test was performed to test participants’ perceptions of the vignettes’ realism. The comparison value was 4, or the midpoint of the scale. The test of the
scale following the equitable vignette \((M = 6.10, SD = 0.97)\) was significant, \(t (334) = 39.63, p < .01, \eta^2 = .82\). The test for the scale following the underreward vignette \((M = 5.48, SD = 1.08)\) was also significant, \(t (170) = 17.90, p < .01, \eta^2 = .65\), as was the test for the scale following the overreward vignette \((M = 5.14, SD = 1.20)\), \(t (162) = 12.06, p < .01, \eta^2 = .47\), indicating all vignettes were realistic for the U.S. sample. The realism of the two vignettes was compared using a paired-samples t-test. Although both scales tested as quite realistic, the scale following the equitable vignette was significantly more realistic than the scale following the inequitable vignette \((M = 5.31, SD = 1.15)\), \(t (333) = 13.01, p < .01, \eta^2 = .34\).

Koreans viewed both vignettes as realistic as well. The test of the scale following the equitable vignette \((M = 5.79, SD = 1.09)\) was significant, \(t (277) = 27.34, p < .01, \eta^2 = .73\). The overreward vignette \((M = 4.65, SD = 1.47)\) was perceived to be realistic, \(t (143) = 5.27, p < .01, \eta^2 = .16\) and the underreward vignette \((M = 5.12, SD = 1.09)\) was also perceived to be realistic, \(t (131) = 11.75, p < .01, \eta^2 = .51\). A paired-sample t-test was performed to compare the realism of the two vignettes. Like the Americans, Koreans saw the equitable vignette as more realistic than the inequitable vignette \((M = 4.87, SD = 1.32)\), \(t (275) = 11.84, p < .01, \eta^2 = .34\).

**Fairness.** For the U.S. sample, paired-sample t-tests compared the fairness of the vignettes. The equitable vignette \((M = 5.81, SD = .93)\) was more fair than the underreward vignette \((M = 2.37, SD = .98)\), \(t (170) = 29.84, p < .01, \eta^2 = .84\). and than the overreward vignette. Degrees of freedom range from 61 to 87. \((M = 2.29, SD = 1.23)\), \(t (163) = 27.52, p < .01, \eta^2 = .82\). When compared, the underreward and overreward vignettes were not significantly different, \(t (333) = .609, p = .54, \eta^2 = .00\).

The fairness of the vignettes in the Korean data was also compared using paired-sample t-tests. The equitable vignette \((M = 5.54, SD = 1.00)\) was more fair than the underreward vignette \((M = 3.04, SD = 1.14)\), \(t (131) = 17.87, p < .01, \eta^2 = .71\) and the overreward vignette \((M = 3.10, SD = 1.24)\), \(t (143) = 19.86, p < .01, \eta^2 = .73\). When compared with the overreward vignette, the underreward vignette was not significantly different, \(t (274) = -.44, p = .66, \eta^2 = .00\).²

**Comparisons of U.S. and Korea.** U.S. participants perceived the equitable situation to be more realistic \((M = 6.10, SD = 0.97)\) than Korean participants did \((M = 5.79, SD = 1.09)\), \(t (611) = 3.74, p < .01, \eta^2 = .02\). U.S. participants also perceived the overreward vignette to be more realistic \((M = 5.14, SD = 1.20)\) than Korean participants did \((M = 4.65, SD = 1.47)\), \(t (305) = 3.21, p < .01, \eta^2 = .03\). For underreward, there was also a significant difference between U.S. \((M = 5.48, SD = 1.08)\) and Korean participants \((M = 5.12, SD = 1.09)\), \(t (301) = 2.83, p < .01, \eta^2 = .03\).

² One-sample t-tests were performed to test perceptions of fairness of the vignettes. The comparison value was 4, or the midpoint of the scale; higher than four would indicate the vignette was fair, while lower than four would indicate it was unfair. U.S. participants viewed the equitable vignette as fair \((M = 5.81, SD = .93)\), \(t (334) = 35.69, p < .01, \eta^2 = .79\). The inequitable vignettes were viewed as unfair. Following the inequitable vignette, the underreward scale scores \((M = 2.37, SD = .98)\) were significantly lower than the midpoint, \(t (170) = -21.78, p < .01, \eta^2 = .74\), and the overreward scale scores \((M = 2.29, SD = 1.23)\) were also significantly lower than the midpoint, \(t (163) = -17.83, p < .01, \eta^2 = .66\). When a paired-sample t-test was performed to compare the fairness of the equitable and the inequitable vignettes, the equitable vignette tested as more fair than the inequitable vignette, \(t (334) = 40.45, p < .01, \eta^2 = .83\).

Koreans also viewed the equitable vignette as fair and the inequitable vignettes as unfair. The scores of the equitable vignette \((M = 5.54, SD = 1.00)\) were significantly higher than the midpoint, \(t (277) = 25.71, p < .01, \eta^2 = .70\). Following the inequitable vignette, the underreward scale scores \((M = 3.04, SD = 1.14)\) were significantly lower than the midpoint, \(t (131) = -9.68, p < .01, \eta^2 = .42\), and the overreward scale scores \((M = 3.10, SD = 1.24)\) were also significantly lower than the midpoint, \(t (143) = -8.70, p < .01, \eta^2 = .35\). A paired-sample t-test showed that the equitable vignette was more fair than the inequitable vignette, \(t (275) = 26.68, p < .01, \eta^2 = .72\).
Korean participants \((M = 5.54, SD = 1.00)\) perceived the equitable situation to be less fair than U.S. participants \((M = 5.81, SD = 0.93)\), \(t (611) = 3.50, p < .01, \eta^2 = .04\). However, Korean participants \((M = 3.10, SD = 1.24)\) also perceived the overreward situation to be more fair than did U.S. participants \((M = 2.29, SD = 1.23)\), \(t (306) = -5.72, p < .01, \eta^2 = .10\). Korean participants \((M = 3.04, SD = 1.14)\) and American participants \((M = 2.37, SD = 0.98)\) did not perceive the underrewarded situation differently, \(t (301) = -5.47, p < .01, \eta^2 = .09\). It seems that the fineness of fairness judgments differs between Korean and American participants in some cases.

### Results

#### Overview

To test the hypothesis and the research questions, a three-way ANOVA was conducted for each dependent variable (change in satisfaction, intent to do nothing, willingness to terminate). The hypothesis expected a main effect for type of inequity on change in satisfaction such that satisfaction would decrease more in the case of underreward than overreward. The six research questions all queried how Americans and Koreans would differ on type of inequity (underreward/overreward) and friendship dimension (task/social). In other words, the research questions focused on two- and three-way interaction effects among the factors.

#### Relationship Satisfaction

A 2 (relationship dimension: social and task) \(\times\) 2 (inequity type: underreward and overreward) \(\times\) 2 (national culture: U.S. and Korea) ANOVA was conducted on reduction in satisfaction with the relationship when equity level changes. All three main effects were statistically significant. Pertaining to the hypothesis, the ANOVA revealed a greater reduction in satisfaction in an underreward situation \((M = 1.96, SD = 1.44)\) than in an overreward situation \((M = 1.44, SD = 1.48)\), \(F (1, 599) = 21.46, p < .01, \eta^2 = .03\). The data were consistent with the hypothesis, which predicted a greater reduction in an underreward than an overreward situation. See table 3 for equity level means and standard deviations. For relationship dimensions, a greater reduction in satisfaction was observed in the social dimension \((M = 2.04, SD = 1.59)\) than in the task dimension \((M = 1.34, SD = 1.26)\), \(F (1, 599) = 43.22, p < .001, \eta^2 = .06\). For culture, a greater reduction in satisfaction was observed among Koreans \((M = 1.89, SD = 1.58)\) than among Americans \((M = 1.55, SD = 1.39)\), \(F (1, 599) = 8.02, p < .01, \eta^2 = .01\). See Table 4 for relationship dimension means and standard deviations. These main effects were, however, qualified by interactions.
Table 3: Means of Satisfaction for Equity Level and Culture

<table>
<thead>
<tr>
<th>Culture</th>
<th>Underrewarded relationship</th>
<th>Overrewarded relationship</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Satisfaction with equity</td>
<td>Satisfaction with inequity</td>
</tr>
<tr>
<td>Korea</td>
<td>4.91 (1.02)</td>
<td>2.92 (1.00)</td>
</tr>
<tr>
<td>U.S.</td>
<td>5.19 (0.91)</td>
<td>3.25 (1.05)</td>
</tr>
</tbody>
</table>

Standard deviations are reported in parentheses.

Table 4: Means of Satisfaction for Relationship Dimension and Culture

<table>
<thead>
<tr>
<th>Culture</th>
<th>Social dimension</th>
<th>Task dimension</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Satisfaction with equity</td>
<td>Satisfaction with inequity</td>
</tr>
<tr>
<td>Korea</td>
<td>5.25 (1.17)</td>
<td>2.73 (1.14)</td>
</tr>
<tr>
<td>U.S.</td>
<td>5.24 (0.93)</td>
<td>3.63 (1.14)</td>
</tr>
</tbody>
</table>

Standard deviations are reported in parentheses.

**Interactions.** Addressing RQ1, significant interaction effects were observed for inequity type and culture, $F(1, 599) = 6.78, p < .001, \eta^2 = .01$. Post-hoc comparisons of cell means indicate that the smallest reduction in relationship satisfaction was observed among Americans for underreward situations. More specifically, Americans ($M_d = -1.13$) had lower reduction in satisfaction than Koreans ($M_d = -1.79$) for overrewarding relationships, whereas Koreans ($M_d = -2.00$) and Americans ($M_d = -1.94$) did not significantly differ for underrewarding relationships. The interaction was also significant for relationship dimensions and culture, $F(1, 599) = 29.64, p < .001, \eta^2 = .04$. Post-hoc comparisons of cell means indicate that the greatest reduction in relationship satisfaction was observed among Koreans for the social dimension of their blended friendship. More specifically, when inequity occurred, Koreans showed a greater reduction in satisfaction in the social dimension ($M_d = -2.53$) than in the task dimension ($M_d = -1.17$), whereas Americans showed a similar level of reduction in satisfaction for both social ($M_d = -1.62$) and task ($M_d = -1.48$) dimensions. Other interactions were not statistically significant. The interaction effects were not significant for relationship dimensions and inequity types, $F(1, 599) = 1.38, p = .24, \eta^2 = .002$ nor (as queried in RQ2) for relationship dimensions, inequity types, and culture, $F(1, 599) = 0.97, p = .33, \eta^2 = .001$.

**Intent to Do Nothing about the Inequity**

A 2 (relationship dimension: social and task) × 2 (inequity type: underreward and overreward) × 2 (culture: U.S. and Korea) ANOVA was conducted on intent to do nothing about the inequity. There was no significant main effect for relationship dimension, $F(1, 603) = 3.68, p = .06, \eta^2 = .006$. Intent to do nothing was not necessarily greater for the social dimension ($M = 3.21, SD = 1.20$) than for the task dimension ($M = 2.99, SD = 1.23$). For inequity type, however, there was a significant main effect, $F(1, 603) = 9.67, p < .01, \eta^2 = .02$. A greater intent to do nothing was observed among the underrewarded ($M = 3.24, SD = 1.12$) than among the...
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overrewarded ($M = 2.97, SD = 1.29$). There was also a significant main effect for culture, $F(1, 603) = 19.42, p < .01, \eta^2 = .03$. A greater intent to do nothing was observed among Koreans ($M = 3.33, SD = 1.11$) than among Americans ($M = 2.92, SD = 1.28$). When compared to the scale middle point, however, the mean score of Koreans on intent to do nothing ($M = 3.33, SD = 1.11$) was significantly lower than 4, $t(276) = -10.17, p < .01, \eta^2 = .27$. Thus, the interpretation of the findings for intent to do nothing requires caution; comparisons can be made about social versus task dimension, overreward versus underreward, and Koreans versus Americans, while keeping in mind that across all these conditions the participants on the average disagreed with doing nothing about the inequitable relationships. If disagreement with doing nothing about the inequitable relationship indicates intention to do something about the relationship, the finding may be interpreted as greater intention to do something about the inequitable relationship when inequity occurs among the overrewarded rather than among the underrewarded, and among Americans rather than among Koreans.

To address RQ3, a significant interaction effect was observed for inequity types and culture, $F(1, 603) = 10.54, p < .01, \eta^2 = .02$. The cultural difference was observed for underreward situations, but not for overreward situations. Koreans were more likely to intend to do nothing about the underrewarded relationship ($M = 3.64, SD = .90$) than about the overrewarded relationship ($M = 3.03, SD = 1.20$), while Americans had the same level of intent to do nothing for the underrewarded ($M = 2.93, SD = 1.18$) and overrewarded ($M = 2.92, SD = 1.37$) relationships. Relationship dimension and culture also interacted, producing a significant interaction effect, $F(1, 603) = 9.39, p < .01, \eta^2 = .02$. Post hoc comparisons showed that Americans ($M = 2.68, SD = 1.28$) and Koreans ($M = 3.38, SD = 1.04$) differed significantly in their reduction in intent to do nothing about the relationship with inequity in the task dimension, while no significant difference was observed between Koreans ($M = 3.27, SD = 1.16$) and Americans ($M = 3.16, SD = 1.23$) for the social dimension. The interaction between relationship dimension and inequity type was not significant, $F(1, 603) = 0.02, p = .88, \eta^2 = .00$. The interaction among relationship dimension, inequity type, and culture, as queried in RQ4, was also not significant, $F(1, 603) = 0.26, p = .61, \eta^2 = .00$.

Willingness to Terminate the Relationship

A 2 (relationship dimension: social and task) × 2 (inequity type: underreward and overreward) × 2 (culture: U.S. and Korea) ANOVA was conducted on willingness to terminate the relationship. There was a non-significant main effect for relationship dimension, $F(1, 603) = 0.09, p = .77, \eta^2 = .00$. However, there was a significant main effect for inequity type, $F(1, 603) = 23.19, p < .01, \eta^2 = .03$, such that underrewarded individuals ($M = 2.76, SD = 1.19$) were more willing to terminate the relationship than overrewarded individuals ($M = 2.34, SD = 1.19$). There was also a significant main effect for culture, $F(1, 603) = 66.38, p < .001, \eta^2 = .09$. Koreans ($M = 2.95, SD = 1.20$) were more willing than Americans ($M = 2.21, SD = 1.10$) to terminate their inequitable relationship. This finding should be interpreted cautiously because all means were lower than the mid point (4) of the 7-point scale, indicating most participants disagreed with termination as a solution to the inequity problem. This main effect was also qualified by interaction effects.

There was a significant interaction effect for relationship dimension and inequity type, $F(1, 603) = 5.00, p < .05, \eta^2 = .01$. In the social situation, underrewarded ($M = 2.64, SD = 1.18$) and overrewarded individuals ($M = 2.43, SD = 1.32$) did not differ, while in the task situation,
underrewarded individuals ($M = 2.89, SD = 1.18$) were more willing to terminate than overrewarded individuals ($M = 2.24, SD = 1.02$). As an answer to RQ5, the interaction between inequity type and culture was not significant, $F (1, 603) = 0.14, p = .71, \eta^2 = .00$. The interaction among relationship dimension, inequity type, and culture, as addressed in RQ6 was also not significant, $F (1, 603) = 0.19, p = .66, \eta^2 = .00$. Finally, the interaction was not significant for relationship dimension and culture, $F (1, 603) = 2.49, p = .12, \eta^2 = .004$.

**Discussion**

The current study investigated cultural differences in responses to inequity in different settings. Previous cross-cultural research on equity has focused on choices between equity and equality principles in reward allocation. This study focuses on the changes in members’ satisfaction with equitable versus underrewarding or overrewarding relationships, and members’ tendencies to do nothing about inequity or terminate an inequitable relationship. The likely responses of Susan to her American coworkers and Young Hee to her Korean coworkers are discussed in the next sections. Results summaries and implications follow for change in satisfaction from equitable to inequitable relationships, intent to do nothing about an inequitable relationship, and willingness to terminate an inequitable relationship.

**Change in Relationship Satisfaction**

In general, satisfaction did decrease between the equitable situation and both types of inequitable situations. The cross-cultural differences in satisfaction decrease were observed only for overreward, but not for underreward. The Koreans’ satisfaction decreased more than the Americans’ when they were overrewarded. In other words, Koreans were less satisfied than Americans with being overrewarded. Another way of examining the interaction pattern indicates that Koreans’ satisfaction decrease level did not differ for underreward and for overreward, while Americans’ satisfaction decreased to a greater extent for underreward than for overreward. Previous findings with American participants have shown that while inequity can generate discomfort, people are more uncomfortable with being underrewarded than with being overrewarded (Hegtvedt, 1990). The current research shows that such findings may not generalize to people in other cultures. For Koreans, being overrewarded may indicate relational disharmony as much as being underrewarded does.

Overall, a greater reduction in satisfaction occurred in the social dimension than the task dimension. Compared to Americans, Koreans had greater reduction in satisfaction with inequitable relationships in the social dimension. Americans’ and Koreans’ reduction in satisfaction did not differ with inequity in the task dimension, however. Alternate interpretation would suggest that while Americans’ satisfaction decrease level did not differ between the social dimension and the task dimension, Koreans’ satisfaction decreased to a greater extent for social dimension than for task dimension.

The cultural difference in the social dimension of inequitable relationship may indicate that Koreans and Americans may have different expectations about upholding interpersonal harmony in friendships. Americans may not have been as dissatisfied in the social dimension because their expectations for people to maintain interpersonal harmony were not as high as the Koreans’. On the other hand, the lack of cultural difference in the task dimension may be explained by the previous research findings indicating that the Korean workplace has indeed become more
Westernized and expectant of proportional rewards (Lee, 1998-99), such that both Americans and Koreans had similar views on conduct in the task dimension of the coworker relationship. An additional consideration toward this point is universally accepted behaviors in organizations across cultures. Unlike interpersonal or social interactions, behaviors related to tasks in organizations are more likely to be determined by economic criteria (Smith & Bond, 1999). Accordingly, cultural differences may be less in the task dimension than the social dimension.

As for the relationship between satisfaction level with inequity and intention to do nothing about inequity, overall, the finding shows that the more satisfied individuals were, the more likely they were to do nothing. This makes intuitive sense because when individuals are satisfied with a relationship, there is no need to do anything.

**Intent to Do Nothing about the Inequity**

For doing nothing about the inequity, the participants’ overall intention was lower than the scale midpoint, 4, which may indicate that the participants did not necessarily prefer doing nothing about the inequity. Broadly interpreted, this may also indicate that they intended to do something about the inequity. For the moderating role of culture in the relationship between inequity types and intent to do nothing, the findings showed that Americans had weaker intent to do nothing (i.e., stronger intent to do something) about the relationship with inequity in the task dimension than Koreans, whereas no cultural difference was found for the social dimension. This result might be explained by their different cultural orientations. American culture is characterized by individualism which highly values personal achievement (Oyserman et al., 2002). If inequity occurs in the task dimension, it will negatively influence personal achievement in the workplace. It may be more acceptable for Americans to cause a fuss by doing something about inequity. Accordingly, Americans may have more motivation to do something and feel justified in doing something to restore the equity in their relationship with coworkers.

With an overrewarding relationship, Koreans and Americans did not differ in their intent to do nothing. On the other hand, Koreans had greater intent to do nothing than Americans in an underrewarding relationship. Alternatively, Americans, compared to Koreans, had stronger intent to do something about the underrewarding relationship. Koreans’ greater intent to do nothing about underreward may indicate that for Koreans doing something in an underreward situation could disrupt the social harmony, while for Americans, the need for social harmony is not as prominent. Although Koreans showed a greater decrease in satisfaction (i.e., internal feeling) for underreward than for overreward, they may be less likely to do something overt about underreward than about overreward. Considering that Korean people emphasize indirect communication and rely on the other party’s sensitivity and ability to capture the under-the-surface meaning and to understand implicit meaning (Yum, 2000), Koreans may be more likely to do nothing in spite of the decrease in satisfaction. Americans, who rely more on direct and candid communication to get what they need, may not be shy about “rocking the boat” when they are being underrewarded.

Finally, in the task dimension, Koreans’ intent to do nothing was positively correlated with willingness to terminate in both over- and underrewarding relationships. For Americans overrewarded in the social dimension, intent to do nothing was positively correlated with willingness to terminate. The positive correlation between intention to do nothing and willingness to terminate may indicate that doing nothing may underlie one of various ways to terminate the relationship: simply letting it end without confrontation. The positive correlation
occurring in the task dimensions for Koreans also shows cultural differences in how people handle inequity in social versus task dimensions.

**Willingness to terminate the relationship**

Most of the participants did not seem to endorse termination as a solution to the problem of inequity. This finding may be interpreted as willingness to continue the inequitable relationships. Despite this, when compared, underrewarded individuals were more willing than overrewarded individuals to terminate their relationships. This bore out more specifically in a task situation, where underrewarded individuals were more willing to terminate than overrewarded individuals. There was no difference in the social setting. This may indicate people are more comfortable ending a work relationship than a social relationship, keeping in mind that no participant seemed very likely to terminate the relationship.

For the relationship between satisfaction level with inequitable relationships and willingness to terminate inequitable relationships, it was found that when underrewarded in both social and task dimensions, Americans were less likely to terminate when they were more satisfied. Overrewarded Koreans in the task dimension were more likely to terminate the more satisfied they were. This may be due to Koreans’ inner conflict paralleling the disparate descriptions of their workplaces. They may recognize the benefits of being overrewarded, yet also feel the need to maintain harmonious relationships and not look selfish. They may also feel some guilt at being overrewarded, as suggested by Walster et al. (1973).

**Future Directions and Limitations**

This study was limited by the use of vignettes. These may not have allowed for the most realistic responses. However, this approach is recommended as a way of dealing with equity questions in cross-cultural settings (Leung & Bond, 1984) in part because it allows for control of the magnitude of the inequity. Because inequity is in the eye of the beholder, it was necessary to create a similar inequitable situation so that participants were responding to similar levels of inequity rather than widely disparate personal experiences of inequity (e.g., broken romantic relationship vs. borrowing a stapler too often).

The measurement used for willingness to terminate the relationship was effective, but it did not provide us with information as to what would cause people to terminate an inequitable relationship. In the future, it would be interesting to use open-ended questioning to find out what strength or type of inequity would cause people to terminate their relationships.

**Conclusion**

Considering both the increasing amount of time spent in the workplace and the increase in cross-cultural makeup of organizations, (Evans, 2000; Fullerton, 1997; Johnston & Packer, 1987), it is increasingly likely for people from different cultures to interact within organizations, forming interpersonal relationships (e.g., friendship). Susan and Young Hee may eventually run into each other in the same workplace and have to figure out how to interact. These relationships may take on multiple dimensions, involving both task and social aspects, and increasing the difficulties of dealing with inequities as they occur. Increasing the knowledge base about these types of relationships can aid organizations and their members in their day-to-day operations.
Appendix A. Vignettes (English Version)

Equitable - Task
You and Chris are both friends and coworkers. You work in identical positions in the same department of the same company. Not only do you work together, you are also friends outside of the workplace.

At work, you and Chris must jointly come up with a monthly budget report for your company’s supply closet. You are supposed to do an inventory of everything in the supply closet and Chris is supposed to do the math to figure out what needs to be replaced and how much the replacements will cost. This arrangement seems to work out fine. You do your part and Chris does Chris’s part.

Underreward - Task
You and Chris are both friends and coworkers. You work in identical positions in the same department of the same company. Not only do you work together, you are also friends outside of the workplace.

At work, you and Chris must jointly come up with a monthly budget report for your company’s supply closet. You are supposed to do an inventory of everything in the supply closet and Chris is supposed to do the math to figure out what needs to be replaced and how much the replacements will cost. However, sometimes Chris can’t seem to get Chris’ part done and you end up doing the entire report. You never complain about helping Chris, but simply do the report and move on.

Overreward - Task
You and Chris are both friends and coworkers. You work in identical positions in the same department of the same company. Not only do you work together, you are also friends outside of the workplace.

At work, you and Chris must jointly come up with a monthly budget report for your company’s supply closet. You are supposed to do an inventory of everything in the supply closet and Chris is supposed to do the math to figure out what needs to be replaced and how much the replacements will cost. However, sometimes you can’t seem to get your part done and Chris ends up doing the entire report. Chris never complains about helping you, but simply does the report and moves on.

Equitable – Social*
You and Chris are both friends and coworkers. You work in identical positions in the same department of the same company. Not only do you work together, you are also friends outside of the workplace.

Outside of work, you and Chris rollerblade together. You often spend time on the weekends rollerblading just for fun and you also do other things together, like going out for a drink after work. You take turns picking each other up to go to the park, which is halfway between your houses. By the same token, you both take turns bringing water and snacks for after your workout.

Overreward – Social*
You and Chris are both friends and coworkers. You work in identical positions in the same department of the same company. Not only do you work together, you are also friends outside of the workplace.

Outside of work, you and Chris rollerblade together. You often spend time on the weekends rollerblading just for fun and you also do other things together, like going out for a drink after work. You often ask Chris to pick you up and drive to a park that is closer to your
Underreward – Social*

You and Chris are both friends and coworkers. You work in identical positions in the same department of the same company. Not only do you work together, you are also friends outside of the workplace.

Outside of work, you and Chris rollerblade together. You often spend time on the weekends rollerblading just for fun and you also do other things together, like going out for a drink after work. Chris often asks you to drive and go to a park that is near Chris’s house, even though it’s quite far out of your way and you have to drive through a lot of traffic to get there. Not only that, but Chris usually depends on you to bring water and snacks for after the workout.

*For the social dimension vignettes in the Korean version, “mountain-climbing” was substituted for “rollerblading” in the English version, because “rollerblading” is far less common than “mountain-climbing” in Korea.
References


Using Attachment Theory to Study Satisfaction in Father-Daughter Relationships

Narissra Maria Punyanunt-Carter
Department of Communication Studies
Texas Tech University
P.O. BOX 43083
Lubbock, TX 79406-3083
(806) 742-3273
n.punyanunt@ttu.edu

Narissra Maria Punyanunt-Carter (Ph.D., Kent State University, 2002) is an assistant professor in the department of communication at Texas Tech University. This article is based on the dissertation completed by the first author under the direction of Dr. Rebecca Rubin.
Abstract

The objective of this study was to investigate attachment theory in father-daughter relationships and levels of satisfaction. Two hundred and seven father-daughter dyads participated in the study. It was predicted that secure attachment styles would have higher satisfaction than other attachment styles. This finding was only partially supported. The only significant relationship was that secure daughters had higher communication satisfaction than avoidant daughters. Fathers’ satisfaction levels did not differ among attachment styles.

Key words: fathers, daughters, satisfaction, and attachment theory
Introduction

Socha and Stamp (1995) stated that “communication is certainly an integral part of the process of attaining stability, satisfaction, and fulfillment in contemporary parent-child relationships” (p. xi). Yet, very little research has looked at the communication behaviors between fathers and daughters. Furthermore, little research has looked at the father-daughter relationship using attachment theory. More research is needed to investigate father-daughter communication and their satisfaction levels with each other. Hence, the objective of this study is to understand how attachment theory affects perceptions of satisfaction in father-daughter relationships.

Attachment Theory

Attachment theory (Bowlby, 1988) is a useful framework for father-daughter relationships and the dynamics of these relationships. Ainsworth, Blehar, Waters, and Wall (1978) noted that attachment theory helps explain the importance of communication in relationships. Moreover, Guerrero and Burgoon (1996) believed that attachment styles are highly related to communication behavior. Hence, it is a useful theory to study the communication aspects within the father-daughter relationship.

Attachment theory, created by Bowlby (1969, 1973, 1975, 1979), has been used to understand individuals’ first relationships or attachment bonds and the impact they have later in life (Bowlby, 1979). Bowlby (1977) explained that attachment theory refers to, “the propensity of human beings to make strong affectional bonds to particular others” (p. 201). Bowlby believed that the bonds between the infant and caretaker develop into prototypes for other relationships. Bowlby maintained that attachment styles play a vital role from childhood through adulthood. Based on research dealing with children and adults, researchers have developed a three-category model of adult attachment styles (Hazan & Shaver, 1987).

The three attachment styles for adults are: secure, avoidant, and anxious/ambivalent. Hazan and Shaver (1987) defined secure adults as individuals who have a positive self perception and positive perception of others. In general, secure adults do not worry about being deserted or oppressed in relationships. Secure attachment styles form relationships with others easily and are competent. Avoidant adults do not trust others and do not enjoy being immediate with others. Avoidant individuals often worry about being involved in oppressed relationships. Anxious/ambivalent adults are individuals who desire close relationships. However, they tend to view themselves as incompetent and think that others will view them as incompetent. These different attachment styles have been used for research.

Hazen and Shaver (1987) found that secure individuals perceive other people are more trustworthy than avoidant and anxious/ambivalent individuals. Moreover, Mikulincer and Nachson (1991) reported that secure individuals self-disclose more than avoidant and anxious/ambivalent individuals. Results also showed that anxious/ambivalent individuals disclosed topics of personal importance. Avoidant individuals had the lowest amount of self-disclosure compared to anxious/ambivalent and secure individuals. Overall, the three attachment styles vary from each other.

Bartholomew (1990) argued that attachment styles fall into a continuum of two dimensions. The first dimension looks at the self-image of the individual and the degree that he/she feels worthy of affection. The second dimension looks at the individual’s perspective on
other people and the degree that he/she feels worthy of affection from others. Bartholomew and Horowitz (1991) used these two dimensions to create four different attachment styles. Secure attachment styles are high on both dimensions. Preoccupied attachment styles perceive themselves poorly, but view others highly. Because they are so focused on obtaining others’ approval, they are called preoccupied. Fearful attachment styles are low on both dimensions. Fearful individuals view themselves negatively and expect others to treat them poorly. Dismissing attachment styles have a high self-image, but low image of others. Dismissing individuals project an impression of independence in order to safeguard bad relationships.

Becker, Billings, Eveleth, and Gilbert (1997) argued that Hazan and Shaver’s (1987) and Bartholomew and Horowitz’s (1991) secure attachment styles were the same. They also noted that fearful and dismissing attachment styles are the same as avoidant attachment because these individuals do not like being involved with close relationships. The authors declared that the anxious/ambivalent attachment style is similar to the preoccupied attachment style. Nonetheless, the authors maintained that the bulk of attachment style literature mainly used the three attachment styles.

The main assumption of attachment theory is that behaviors are determined by attachment styles (Hazen & Shaver, 1987). Wegel and Polcar (2000) noted that several research studies have linked attachment styles to adult perceptions of their relationship. Moreover, Wegel and Polcar discovered a link between attachment and communication behavior. Specifically, Wegel and Polcar found that attachment styles varied in their amount of self-disclose and level of communication competence.

Main and Cassidy (1988) discovered that secure children have higher communication competence than avoidant and anxious/ambivalent children. Also, Rholes, Simpson, and Blakely (1995) examined attachment styles of mothers to their infant children. They found that avoidant mothers were not supportive in interactions with their child, and mothers felt distant from their children compared to the other attachment styles. Past research has shown that attachment theory is useful in explaining parent-child relationships.

Viviona (2000) reasoned that attachment theory provides a theoretical paradigm to study different aspects across individuals’ lifespan. Viviona stated that secure attachment styles are especially important for college adjustment. She also stated that, “lack of a self-report measure of late adolescent parental attachment style has threatened to hinder expansion of the empirical basis of attachment theory” (p. 316). Viviona observed that securely attached late adolescents were less depressed, anxious, and fearful than insecurely attached late adolescents. She also found sex differences among attachment styles. Insecurely attached women reported low levels of intimacy development and low levels of college adjustment. Viviona argued that the parental attachment style plays a major role in explaining late adolescent development. For that reason, attachment theory was used as a theoretical framework for this study.

Even though fathers may not be the primary attachment figure in a daughter’s life, fathers are nevertheless an important attachment figure (Collins & Read, 1990). Krause and Haverkamp (1996) mentioned that attachment styles help to explain parent-child relationships. Krause et al. found that parental attachment styles determine the type of relationships that parents and children will have with each other. For instance, Whitbeck, Simmons, and Conger (1991) noticed that avoidant attachment individuals were less likely to communicate with their parents. Thus, one can assume that attachment theory can be used to predict relational outcomes and relationship quality in parent-child relationships.
Because most of the research looking at attachment styles has concentrated on romantic relationships, there may be differences in family relationships. Research on family communication has found certain characteristics that separate families from other types of relationships.

Fathers and daughters can be categorized by their attachment styles. Past research on attachment theory has shown that attachment styles are related to empathy (Mikulincer, Gillath, Halevy, Avihou, Avidan, & Eshkoli, 2001), anger (Mikulincer, 1998), information-processing (Mikulincer, 1997) and self-disclosure (Mikulincer & Nachson, 1991). Research has indicated that individuals with secure attachment styles display more empathy, less anger, and process information better than individuals with avoidant attachment styles.

This literature suggests that attachment style should influence relational subsequent outcomes. Specifically, satisfaction should be related to style. Father and daughter communication relationships can help us understand family relationships (Fitzpatrick, 1988). Overall, these father-daughter attachment styles should affect the level of satisfaction.

In order to understand satisfaction in the father-daughter relationship, attachment theory is used in this study. Bowlby (1977) claimed that attachment styles could describe communication behavior from childhood to adulthood. From past research dealing with both children and adults’ attachment styles, Hazen and Shaver (1987) found three attachment styles—secure, avoidant, and anxious/ambivalent—and a relationship between these attachment styles and perceptions concerning their relationships with others. These attachment styles can also affect communication behaviors and relational outcomes (Bowlby, 1988).

Satisfaction

There are two types of satisfaction: relational and communication. Dainton, Stafford, and Canary (1994) defined relational satisfaction as the feelings toward another and the quality of the relationship. Hecht (1978b) explained that satisfaction is an internal reinforcer and based on expectations. In other words, Hecht believed that communication satisfaction is the fulfillment of expectations. Thus, ratings of satisfaction can be assessed by analyzing levels of relational and communication satisfaction.

Communication is essential to relational satisfaction (Dindia, 1994; Noller & Fitzpatrick, 1990). Lewis and Spanier (1979) stated that the satisfaction of a relationship is due to how effective and frequent communication is. Gottman and Carrere (1994) contended that negative perceptions of satisfaction affect the long-term stability of the relationship. Martin and Anderson (1995) reasoned that if the relationship is not satisfactory, then the relationship may be terminated. Thus, both relational and communication satisfaction will be analyzed in this study.

Satisfaction is an outcome gained from perceptions of the communication interaction (Spitzberg & Hecht, 1984). The greater the interaction, the higher the level of relationship satisfaction (Lewis & Spanier, 1979). Hinde (1997) agreed, stating that satisfaction is related to communication and the attributions of the communication. Based on this research, not only the type of communication, but the amount of communication is associated with satisfaction.

Furthermore, Richards (1989) noted that high levels of satisfaction occur in families that display more supportive, agreeable, and positive statements. Satisfaction should be higher in relationships that have daughters with secure attachment styles. Thus, father-daughter satisfaction will be the dependent variable and father-daughter attachment types will be the independent variables in this study.
Rationale

All in all, this study is warranted for three reasons. First, past research has mainly focused on romantic relationships. The reasons fathers and daughters have for communicating with each other may be very specific to the father-daughter relationship. Second, father and daughter satisfaction may vary depending on the type of relationship they have. Third, the attachment styles in the father-daughter relationship may influence the level of satisfaction.

Hypotheses

Past literature has demonstrated that father-daughter relationships are important to look at because of the effects that fathers have on their daughters (Siegel, 1987). Research has also shown that fathers communicate with their daughters differently than with their sons (Buerkel-Rothfuss et al., 1995). Thus, the goal of this study is to understand the father-daughter relationship through examination of satisfaction.

Guided by attachment theory, I assume in this study that each father-daughter relationship has a unique attachment style. In turn, the father attachment style should influence levels of daughters’ and fathers’ communication and relational satisfaction. An initial step to understanding father-daughter satisfaction is to look at the father-daughter attachment styles. Marcus (1997) looked at premarital couples and newlyweds in regards to their attachment style and communication patterns. Marcus discovered that individuals who have secure attachment styles also have higher amounts of satisfaction. Moreover, Marcus noted a strong relationship between communication and satisfaction, yet this study only dealt with marital couples and did not specifically focus on communication satisfaction.

However, I proposed the following hypotheses:

- **H1a**: Daughters with secure attachment styles will have significantly higher levels of communication satisfaction than those with avoidant attachment styles.
- **H1b**: Daughters with secure attachment styles will have significantly higher levels of communication satisfaction than those with anxious/ambivalent attachment styles.
- **H1c**: Fathers of daughters with secure attachment styles will have significantly higher levels of communication satisfaction than those with avoidant attachment styles.
- **H1d**: Fathers of daughters with secure attachment styles will have significantly higher levels of communication satisfaction than those with anxious/ambivalent attachment styles.

Tucker and Andres (1999) looked at attachment styles and relationship satisfaction in romantic couples. They found that anxious men and avoidant men and women were more likely to report low levels of satisfaction. Yet, secure men and women reported high levels of satisfaction. Because Tucker and Andres (1999) found a relationship between attachment styles and relationship satisfaction in romantic couples, the following four hypotheses were created:

- **H2a**: Daughters with secure attachment styles will have significantly higher levels of relationship satisfaction than those with avoidant attachment styles.
- **H2b**: Daughters with secure attachment styles will have significantly higher levels of relationship satisfaction than those with anxious/ambivalent attachment styles.
- **H2c**: Daughters with secure attachment styles will have significantly higher levels of father relationship satisfaction than daughter relationships with avoidant attachment styles.
H2d: Fathers of daughters with secure attachment styles will have significantly higher levels of relationship satisfaction than those with anxious/ambivalent attachment styles.

Sample

Research participants were 250 female college students from a variety of majors (with a living father) enrolled in an introductory communication course at Kent State University (KSU) and their fathers. Daughters ranged in age from 18 to 35 years old ($M = 20.2$, $SD = 2.50$), and fathers ranged in age from 38 to 72 ($M = 49.6$, $SD = 6.16$). This sample was advantageous because the participants are at an age where they can remember past interactions with their fathers. So, a sample of fathers and daughters who live apart was appropriate for this study.

Out of the 250 female participants, 207 of their fathers completed and returned their questionnaires. This was an 83% response rate, which is higher than most studies (e.g., Stafford, Dainton, & Haas, 2000). The father-and-daughter data were paired together by a number given to each father-daughter dyad.

Procedures

Once the study was approved by KSU Human Subjects Review Board, the following procedures were used in the data collection process. Two hundred and fifty college-aged female participants enrolled in the basic communication course were asked to complete this survey. These participants were told that their responses would be kept confidential and anonymous. Female students who participated were offered course research credit.

After participants volunteered to participate in the study, they read and signed consent forms. Then, the participants were given a questionnaire with a special number that matched the number on the father questionnaire. Daughters completed the questionnaire during a designated research time period. Then, each daughter was given a sealed envelope, which contained the father’s questionnaire. Each daughter was instructed to write her name and a persuasive note to her father (encouraging and instructing him to complete the questionnaire) on the back of the envelope. Then, the daughters were told to address the front envelopes to their fathers.

Fathers were instructed to report on the relationship with the daughter whose name appeared on the back of the envelope. An envelope was included so that fathers could mail their responses to me directly. Questionnaires were collated according to their respective father-daughter dyads. Then, the questionnaire responses were entered in SPSS for data analysis.

Instruments

Attachment Styles

There have been many scales developed to assess adult attachment styles (e.g., Feeney & Noller, 1990; Hazen & Shaver, 1987). Most of these instruments provide a few paragraphs and ask respondents to rate which paragraph is closely related to him or her. To determine the attachment styles present in the father-daughter relationship, I used Becker, Billings, Eveleth, and Gilbert’s (1997) attachment styles scale. Because other measures of attachment styles have been viewed as ipsative and low in reliability, the attachment style scale is the best alternative (Becker et al., 1997). Moreover, Becker et al. examined several attachment style measures and
found low Cronbach alphas, low internal consistency, and bias wording. Becker et al.’s scale combines into one scale all the attachment measures that other scholars have used. Hence, the scale has a high internal consistency compared to other instruments.

The scale consisted of 25 Likert-type items that ranged from 1 (very characteristic of me) to 7 (not at all characteristic of me). All items that needed to be reverse-coded were recoded before I began data analysis. I also reversed coded the range so that the higher number represents level of agreement for the characteristic.

Each item was placed into the appropriate subscale. The Cronbach alpha reliabilities for each subscale were acceptable: Secure had a coefficient alpha of .80 ($M = 40.53$, $SD = 9.86$), avoidant (fearful/dismissing) had a .79 alpha ($M = 23.08$, $SD = 8.12$), and ambivalent/anxious (preoccupied) had a .82 alpha ($M = 22.97$, $SD = 7.44$). Out of the 250 questionnaires, 53.2% had secure attachment types ($n = 133$), 32.8% had avoidant attachment types ($n = 82$), and 14.0% had ambivalent/anxious attachment types ($n = 35$). Attachment types were determined by the highest mean score from the three subscales. Table 1 contains the means and standard deviations for each item.

### Table 1: Attachment Styles Scale

<table>
<thead>
<tr>
<th>Items</th>
<th>$M$</th>
<th>$SD$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Secure 1. I am relatively confident that other people will accept me as I am.</td>
<td>5.53</td>
<td>1.49</td>
</tr>
<tr>
<td>2. I am nervous when anyone gets too close.</td>
<td>4.60</td>
<td>1.88</td>
</tr>
<tr>
<td>3. I worry that I will be hurt if I allow myself to become too close to others.</td>
<td>3.59</td>
<td>1.87</td>
</tr>
<tr>
<td>4. I want emotionally close relationships, but I find it difficult to trust others completely.</td>
<td>3.51</td>
<td>1.94</td>
</tr>
<tr>
<td>5. I do not often worry about other someone getting too close to me.</td>
<td>4.72</td>
<td>1.59</td>
</tr>
<tr>
<td>6. I do not often worry about other people letting me down.</td>
<td>4.21</td>
<td>1.68</td>
</tr>
<tr>
<td>7. I do not often worry about being abandoned.</td>
<td>4.53</td>
<td>1.17</td>
</tr>
<tr>
<td>8. I find it relatively easy to get close to others.</td>
<td>4.86</td>
<td>1.16</td>
</tr>
<tr>
<td>9. I am somewhat uncomfortable being close to others.</td>
<td>4.93</td>
<td>1.70</td>
</tr>
<tr>
<td>Avoidant 10. I am not sure that I can always depend on others to be there when I need them.</td>
<td>4.27</td>
<td>1.84</td>
</tr>
<tr>
<td>11. I find it difficult to allow myself to depend on others.</td>
<td>4.46</td>
<td>1.87</td>
</tr>
<tr>
<td>12. I am comfortable depending on others.</td>
<td>4.24</td>
<td>1.74</td>
</tr>
<tr>
<td>13. People are never there when you need them.</td>
<td>3.00</td>
<td>1.65</td>
</tr>
<tr>
<td>14. I know that others will be there when I need them.</td>
<td>2.93</td>
<td>1.47</td>
</tr>
<tr>
<td>15. I find it difficult to trust others completely.</td>
<td>4.08</td>
<td>1.99</td>
</tr>
<tr>
<td>Anxious/Ambivalent 16. I find others are reluctant to get as close as I would like.</td>
<td>3.44</td>
<td>1.66</td>
</tr>
<tr>
<td>17. Sometimes people do not want to get close to me because I want so much to be close to them.</td>
<td>2.62</td>
<td>1.68</td>
</tr>
<tr>
<td>18. I want to merge completely with another person.</td>
<td>3.87</td>
<td>2.01</td>
</tr>
<tr>
<td>19. I am uncomfortable being without close relationships, but I sometimes worry that others do not value me as much as I value them.</td>
<td>4.41</td>
<td>1.87</td>
</tr>
</tbody>
</table>
Two scales were used to measure father-daughter satisfaction. One scale assessed relationship satisfaction and the other scale assessed communication satisfaction. The scale that assessed relationship satisfaction was used in Beatty and Dobos’s (1992) study to measure relationship satisfaction between fathers and sons. This scale uses five 7-point bi-polar items to measure relational satisfaction: Satisfying-Dissatisfying, Fulfilling-Disappointing, Rewarding-Punishing, Positive-Negative, and Good-Bad. Beatty and Dobos’s Cronbach alpha reliability for their relationship satisfaction scale was .98.

Responses to the five items were summed and averaged to create an index of relational satisfaction. Daughters (M = 5.86, SD = 1.30, α = .96) and fathers (M = 6.30, SD = .98, α = .95) were given the same scale and asked to rate their relationship with the other person. Table 2 contains the satisfaction scale items and the daughters’ and fathers’ means and standard deviations.

Table 2: Means and Standard Deviations of Daughters’ and Fathers’ Relational Satisfaction

<table>
<thead>
<tr>
<th>Items</th>
<th>Daughter a</th>
<th>Father b</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M  SD</td>
<td>M  SD</td>
</tr>
<tr>
<td>1. Satisfying 1 ; 2 ; 3 ; 4 ; 5 ; 6 ; 7 Unsatisfying</td>
<td>2.24 1.45</td>
<td>1.77 1.09</td>
</tr>
<tr>
<td>2. Fulfilling 1 ; 2 ; 3 ; 4 ; 5 ; 6 ; 7 Disapproving</td>
<td>2.28 1.46</td>
<td>1.86 1.36</td>
</tr>
<tr>
<td>3. Positive 1 ; 2 ; 3 ; 4 ; 5 ; 6 ; 7 Negative</td>
<td>2.11 1.39</td>
<td>1.67 1.06</td>
</tr>
<tr>
<td>4. Rewarding 1 ; 2 ; 3 ; 4 ; 5 ; 6 ; 7 Punishing</td>
<td>2.08 1.29</td>
<td>1.66 1.06</td>
</tr>
<tr>
<td>5. Good 1 ; 2 ; 3 ; 4 ; 5 ; 6 ; 7 Bad</td>
<td>1.98 1.37</td>
<td>1.54 0.97</td>
</tr>
</tbody>
</table>

"N = 250. bN = 207.

The second scale is the Interpersonal Communication Satisfaction Inventory (Com-Sat) created by Hecht (1978a, 1978b). The inventory is useful to previous conversations with relationship partners. Com-Sat has been used with other scales as well. For instance, Onyekwere, Rubin, and Infante (1991) and Allman, O’Hair, and Stewart (1994) found a positive relationship between communication competence and communication satisfaction. The inventory has also been applied in different contexts.

In addition, R. B. Rubin and Rubin (1989) found a negative relationship between communication apprehension and communication satisfaction in interpersonal relationships. In
the instructional context, Prisbell (1985) found that satisfaction between teachers and students affects students’ learning. In the health context, Buller and Buller (1987) found that physicians’ communications patterns greatly affect their patients’ satisfaction levels. Overall, the inventory has shown to be both valid and reliable.

The scale consists of Likert items that assess participants’ agreement with 19 statements ranged from 1 (strongly agree) to 7 (strongly disagree). The scale is both reliable and valid. Hecht (1978a) reported an alpha reliability of .97 for participants who assessed real conversations and .90 for participants who assessed recalled conversations. Other studies have also reported high levels of reliability. A. M. Rubin (1993) reported an alpha reliability of .86. In addition, the scale has been adapted and still produced reliable results. In this study, the scale’s reliability was .94 for the daughters and .89 for the fathers. Zakahi (1985) found that the inventory is reliable not only as a self-report measure, but also as a dyadic assessment. In other words, both partners can assess their communication satisfaction with each other in an accurate manner. In this study, both fathers and daughters completed this scale. The scale was used to assess the fathers and daughters’ general conversations with each other. By looking at both the fathers’ and daughters’ responses, I was able to discern their satisfaction levels with each other. Table 3 contains the daughters’ and fathers’ means and standard deviations for the Com-Sat scale items.

Table 3: Means and Standard Deviations for the Interpersonal Communication Satisfaction Inventory

<table>
<thead>
<tr>
<th>Items</th>
<th>Daughter a</th>
<th>Father b</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>1. My father lets me know that I am communicating effectively.</td>
<td>4.86</td>
<td>1.72</td>
</tr>
<tr>
<td>2. Nothing is accomplished in our typical conversations.</td>
<td>5.48</td>
<td>1.69</td>
</tr>
<tr>
<td>3. I would like to have other conversations with my father like the ones we typically have.</td>
<td>5.21</td>
<td>1.62</td>
</tr>
<tr>
<td>4. My father genuinely wants to get to know me.</td>
<td>5.68</td>
<td>1.73</td>
</tr>
<tr>
<td>5. I am very dissatisfied with our typical conversations.</td>
<td>5.75</td>
<td>1.65</td>
</tr>
<tr>
<td>6. I usually have something else to do.</td>
<td>4.13</td>
<td>1.72</td>
</tr>
<tr>
<td>7. I feel that during our typical conversations, I am able to present myself as I want my father to view me.</td>
<td>5.49</td>
<td>1.64</td>
</tr>
<tr>
<td>8. My father shows me that he understands what I say.</td>
<td>5.44</td>
<td>1.58</td>
</tr>
<tr>
<td>9. I am very satisfied with our typical conversations.</td>
<td>5.45</td>
<td>1.58</td>
</tr>
<tr>
<td>10. My father expresses a lot of interest in what I have to say.</td>
<td>5.54</td>
<td>1.49</td>
</tr>
<tr>
<td>11. I do not enjoy our typical conversations.</td>
<td>5.75</td>
<td>1.67</td>
</tr>
<tr>
<td>12. My father does not provide support for what he says.</td>
<td>5.58</td>
<td>1.75</td>
</tr>
<tr>
<td>13. I feel I could talk about anything with my father.</td>
<td>4.12</td>
<td>1.92</td>
</tr>
<tr>
<td>14. We usually get to say what we want.</td>
<td>5.27</td>
<td>1.71</td>
</tr>
<tr>
<td>15. I felt that we could laugh easily together.</td>
<td>5.91</td>
<td>1.49</td>
</tr>
<tr>
<td>16. Our typical conversations flow smoothly.</td>
<td>5.29</td>
<td>1.59</td>
</tr>
<tr>
<td>17. My father changes the topic when his feelings are brought into the conversation.</td>
<td>5.08</td>
<td>1.72</td>
</tr>
<tr>
<td>18. My father frequently said things, which add little to the conversation.</td>
<td>5.23</td>
<td>1.79</td>
</tr>
<tr>
<td>19. We usually talk about things I am not interested in.</td>
<td>5.32</td>
<td>1.53</td>
</tr>
</tbody>
</table>

Note. Items 2, 5, 6, 11, 12, 17, 18, and 19 were reverse-coded prior to analysis. For the father version, Items 1, 3, 4, 7, 8, 10, 12, 13, 17, and 18 were worded “daughter” instead of “father.”

a N = 250. b N = 207.
Data Analysis

Before the data were analyzed, all negatively worded items that needed to be reverse-coded were reverse-coded. In addition, Cronbach alpha reliability tests were calculated on all the measures mentioned earlier. Additionally, the scores were computed so that the higher number reflected higher frequency or agreement with the item.

In addition, all the fathers’ and daughters’ data were matched by a distinct log number given to each dyad. Then, the data were analyzed to determine attachment style type. In order to determine attachment styles, the items were categorized into the appropriate attachment style subscale: secure, avoidant, anxious/ambivalent. Each subscale was calculated to determine the mean. The higher score based on all the subscales determined that particular attachment style. None of the participants had equal means on all or two of the attachment styles. The data were used to test the various hypotheses.

Before these analyses, however, I computed a Pearson product-moment correlation between communication satisfaction and relationship satisfaction. I found a strong relationship between the two variables \((r = .82, p < .001)\). It appears that daughter communication satisfaction was significantly related to daughter relationship satisfaction. Furthermore, father communication satisfaction was significantly related to father relationship satisfaction \((r = .61, p < .001)\). Thus, multivariate analyses were warranted.

For Hypothesis 1a, 1b, 1c, and 1d, I determined the father-daughter’s attachment styles based on the daughters’ perception. As previously stated, communication satisfaction and relational satisfaction are related. Thus, a one-way MANOVA was conducted to examine differences between the three father-daughter attachment types (secure, avoidant, and anxious/ambivalent) and daughters’ and fathers’ communication satisfaction, separately.

For Hypothesis 2a, 2b, 2c, and 2d, I computed another one-way MANOVA to see if secure attachment styles differ from avoidant and anxious/ambivalent styles in terms of daughters’ and fathers’ relationship satisfaction. The hypotheses will be supported if the secure attachment style is significantly higher in satisfaction than the others.

Results

Hypotheses 1 and 2

The first two hypotheses predicted that fathers and daughters in secure attachment styles would report higher levels of satisfaction than those in avoidant and anxious/ambivalent attachment styles. To test the first two hypotheses, one one-way MANOVA was computed with attachment style (secure, avoidant, and anxious/ambivalent) as the independent variable. Father and daughter communication satisfaction and relational satisfaction were entered as repeated-measure dependent variables. The overall MANOVA results for Hypotheses 1 and 2 are presented in Table 4.
Table 4: Multivariate Analysis of Variance for Communication Satisfaction and Relationship Satisfaction

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>F</th>
<th>η²</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Daughters’ Between Effects</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Communication Satisfaction</td>
<td>2</td>
<td>3.15*</td>
<td>0.03</td>
<td>.04</td>
</tr>
<tr>
<td>Relationship Satisfaction</td>
<td>2</td>
<td>0.99</td>
<td>0.01</td>
<td>.37</td>
</tr>
<tr>
<td><strong>Fathers’ Between Effects</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Communication Satisfaction</td>
<td>2</td>
<td>1.45</td>
<td>0.00</td>
<td>.26</td>
</tr>
<tr>
<td>Relationship Satisfaction</td>
<td>2</td>
<td>0.36</td>
<td>0.00</td>
<td>.69</td>
</tr>
</tbody>
</table>

Note. Daughter N = 250, Father N = 207.
- p < .05.

The MANOVA revealed a significant multivariate effect for attachment styles on daughters’ communication satisfaction with their fathers, Wilks’ $\lambda = .96, F (2, 241) = 3.16, p < .05, \eta^2 = .03$. For Hypothesis 1a, a Tukey HSD post-hoc test revealed that daughters with secure styles were significantly higher in communication satisfaction than daughters with avoidant styles. Hypothesis 1a was supported. The overall means from H1 and H2 are presented in Table 5.

Table 5: Means of Communication and Relationship Satisfaction Scores for Attachment Styles

<table>
<thead>
<tr>
<th>Attachment Styles</th>
<th>Daughter Communication</th>
<th>Daughter Relationship</th>
<th>Father Communication</th>
<th>Father Relationship</th>
</tr>
</thead>
<tbody>
<tr>
<td>Secure</td>
<td>5.47 $\text{a}$</td>
<td>5.96</td>
<td>5.68</td>
<td>6.36</td>
</tr>
<tr>
<td>Avoidant</td>
<td>5.10 $\text{a}$</td>
<td>5.70</td>
<td>5.67</td>
<td>6.27</td>
</tr>
<tr>
<td>Anxious/Ambivalent</td>
<td>5.17</td>
<td>5.90</td>
<td>5.63</td>
<td>6.20</td>
</tr>
</tbody>
</table>

Note. Means in the same column that share subscripts differ at $p < .05$ in the Tukey honestly significant difference comparison.

For Hypothesis 1b, anxious/ambivalent attachment styles were not significantly different from secure attachment styles on daughters’ communication satisfaction. Hypothesis 1b was not supported.

Hypotheses 1c and 1d predicted that fathers with daughters who had a secure attachment style would report higher levels of relationship and communication satisfaction than those in avoidant and anxious/ambivalent attachment relationships. Another MANOVA was conducted
on daughters’ attachment styles and fathers’ communication satisfaction. However, there were no significant differences among the attachment styles for fathers’ communication satisfaction with their daughters, Wilks’ $\lambda = .96, F(2, 185) = 1.45, p = .24, \eta^2 = .02$. Thus, Hypothesis 1c and Hypothesis 1d were not supported.

Hypothesis 2a predicted that daughters with secure attachment styles would report higher levels of relationship satisfaction than those with avoidant attachment styles. Hypothesis 2b predicted that daughters with secure attachment styles would report higher levels of relationship satisfaction than those with anxious/ambivalent attachment styles. To test these hypotheses, a multivariate analysis of variance (MANOVA) was computed with father-daughter attachment styles (secure, avoidant, and anxious/ambivalent) as the independent variable and relationship satisfaction as the dependent variable. The MANOVA yielded no significant differences among the attachment styles for daughters’ relationship satisfaction, Wilks’ $\lambda = .98, F(2, 241) = 0.99, p = .38, \eta^2 = .01$. Hypotheses 2a and 2b were not supported.

Hypothesis 2c predicted that daughters with secure attachment styles would have fathers with higher levels of relationship satisfaction than daughters with avoidant attachment styles. Hypothesis 2d predicted that daughters with secure attachment styles would have fathers with higher levels of relationship satisfaction than daughters with anxious/ambivalent attachment styles. To test these hypotheses, a multivariate analysis of variance (MANOVA) was computed with attachment styles (secure, avoidant, and anxious/ambivalent) as the independent variable and daughters’ relationship satisfaction as the dependent variable. The MANOVA yielded no significant differences among the attachment styles for daughter relationship satisfaction, Wilks’ $\lambda = .98, F(2, 185) = 0.36, p = .69, \eta^2 = .01$. Hence, Hypotheses 2c and 2d were not supported.

**Discussion**

Attachment styles develop between children and their primary caretaker (Bowlby, 1973, 1977, 1979, 1988). It is through the child-caregiver relationship that children learn about relationships with others and themselves. Collins and Read (1984) have mentioned that what children learn from these experiences results in stable personality characteristics that stay constant regardless of relationship type. These characteristics or attachment styles can be classified as: secure, avoidant, and anxious/ambivalent (Hazan & Shaver, 1987).

Hazan and Shaver (1987) explained that each of the attachment styles is unique. Secure individuals develop close relationships with others very easily. Secure individuals do not worry about being alone or being emotionally hurt. Avoidant individuals are untrusting of others and are often independent. Anxious/ambivalent individuals perceive that other people are hesitant to get close with them. Anxious/ambivalent individuals are often perceived as non-committal in relationships. Each attachment style is viewed as mutually exclusive from the others.

Further, Wegel and Polcar (2000) described secure individuals as confident and competent communicators. Secure individuals value communication and believe that it is important in maintaining relationships. Avoidant individuals prefer to shy away from relationships. Avoidant individuals are reluctant to express their emotions and are distrustful of others. Anxious/Ambivalent individuals do not feel like competent communicators and are less apt to find interpersonal situations satisfying.

The results of this study indicated that daughters reporting secure attachment styles had higher levels of communication satisfaction than those from avoidant and anxious/ambivalent attachment styles. This finding supports previous research that found that secure attachment styles...
styles have higher satisfaction levels than other attachment styles (Feeney & Noller, 1990; Hazan & Shaver, 1987; Simpson, 1990). Thus, secure attachment styles are more satisfied overall.

Mikulincer and Nachson (1991) found that secure individuals were more likely to self-disclose and were more receptive to their partners than avoidant and anxious/ambivalent individuals. Moreover, avoidant individuals reported low self-disclosure and anxious/ambivalent individuals tended to only self-disclose topics that were important to them. Based on Mikulincer and Nachson’s results, one could assume that secure daughters would disclose more to their fathers than avoidant and anxious/ambivalent daughters. For that reason, secure daughters might experience more communication satisfaction than avoidant and anxious/ambivalent daughters because they are able to tell their fathers whatever they want and are not restrained from talking about certain topics. After all, Martin and Anderson (1995) found a strong positive relationship between father-young adults’ self-disclosure and communication satisfaction.

The results of this study demonstrated that fathers’ communication satisfaction was not affected by attachment styles. Fathers’ communication satisfaction could come from the fact that fathers just enjoy their daughters’ company regardless of their daughters’ attachment style.

Still, one could argue that the results could be due to the fact that only the daughters filled out the attachment scale. Hence, the fact that it was a one-sided perspective may have influenced the results. Fathers may view their attachment with their daughters one way and the daughters may view their attachment with their fathers in a completely different way. Nevertheless, Senchak and Leonard (1992) found that attachment styles were usually consistent with the other person. Looking at marital couples, they noticed that individuals who reported having a secure attachment style also had a spouse who had a secure attachment style. Thus, attachment styles may have been an assessment about how daughters bond with their fathers. Yet, the fathers’ communication satisfaction was not a result of the daughters’ attachment style.

My second hypothesis predicted that secure attachment style daughters would report higher levels of relational satisfaction than avoidant and anxious/ambivalent attachment style daughters. The second hypothesis was not supported, which could indicate that attachment styles do not necessarily differ in relational satisfaction. This finding was a bit surprising considering the fact that Hazan and Shaver (1987) found a strong positive correlation between secure attachment styles and happiness. This may suggest that satisfaction is a low level of happiness (like minimal competence). In addition, Levy and Davis (1988) found strong positive correlations between dating couples’ secure attachment styles and relationship satisfaction. At the same time, Levy and Davis noticed negative correlations between avoidant and anxious/ambivalent attachment styles with relationship satisfaction. This finding could mean that fathers’ and daughters’ relationship satisfaction is not affected significantly by attachment styles, which is more of a psychological perspective.

Because Levy and Davis (1988) found strong correlations between secure attachment styles and relationship satisfaction, I did a follow-up analysis and computed a Pearson correlation on attachment styles and satisfaction. I discovered that there was a significant relationship between secure attachment styles and daughters’ communication satisfaction ($r = .26, p < .01$). Also, another relationship was between secure attachment styles and daughters’ relationship satisfaction ($r = .14, p < .05$). The results from Hypothesis 2 indicated that attachment styles do not differ in relationship satisfaction. However, the results from the Pearson correlations show that there is a significant relationship between secure attachment styles and relationship satisfaction.
Feeney, Noller, and Callan (1994) suggested that relationship satisfaction is influenced by communication. They noted that relationship satisfaction is often a result of communicating positive and supportive messages. Because attachment styles only ascertain how the person feels, they neglect to uncover what the person says. Thus, what daughters and fathers say to each other could be a major influence on how they feel about each other. Although I did a preliminary analysis looking at communication time between fathers and daughters, I found that the amount of communication does not influence satisfaction. This finding seems to indicate that the quality of communication is more valuable than the quantity of communication.

Overall, results indicated that attachment styles do not greatly affect satisfaction. Daughters with secure attachment styles reported higher communication satisfaction with their fathers than did daughters with avoidant attachment styles. This could be due to the predispositions of daughters with secure attachment styles. Attachment styles did not differ on daughters’ relationship satisfaction or fathers’ satisfaction.

Limitations

The first limitation is the generalizability of this study to the general population because the participants were female college students. The second potential limitation of this study could be due to social desirability. The third limitation could be due to the fact that some students chose not to participate because they did not have particularly good relationships with their fathers or did not have fathers. Hence, certain father-daughter relationships could not be tested because certain daughters may have refused to get their fathers involved with this study and/or did not feel like talking about their relationships with their fathers.

Implications

The primary purpose of this study was to examine attachment theory and satisfaction levels in father-daughter relationships. Results indicated that the only significant relationship was that secure daughters had higher communication satisfaction than avoidant daughters. Fathers’ satisfaction levels did not differ among attachment styles.

Moreover, daughters with secure attachment styles have high levels of satisfaction. Thus daughters who are confident and find it easy to get close to others also develop satisfying bonds with their fathers. After all, Kobak and Hazan (1991) found that secure attachment types were more self-reliant and more satisfied than other attachment types.
References


Floyd, K., & Morman, M. T. (2000). Affection received from fathers as a predictor of men’s affection with their own sons: Test of modeling and compensation hypotheses.


Family communication patterns and argumentativeness: An investigation of Chinese college students

Yang Lin
School of Communication
The University of Akron
Kolbe Hall, Rm 108
Akron, Ohio 44325-1003
(330) 972-7600
ylin1@uakron.edu

Andrew S. Rancer
School of Communication
The University of Akron
Kolbe Hall 108
Akron, OH 44325-1003
(330) 972-7600
arancer@uakron.edu

Qingshan Kong
Department of Diplomacy
School of Law
Guangdong University of Foreign Studies
#2 North Baiyun Road
Guangzhou, China 510420
kongqsh@sohu.com

Yang Lin (Ph.D., University of Oklahoma, 1997) is Associate Professor, and Andrew S. Rancer (Ph.D., Kent State University, 1979) is Professor in the School of Communication, University of Akron, Akron, OH 44325-1003. Qingshan Kong is Associate Professor in the School of Law, Guangdong University of Foreign Studies, Guangzhou, China.
Abstract

This study examines Chinese college students’ trait of argumentativeness in relation to their family interpersonal communication patterns (Consensual, Pluralistic, Protective, and Laissez-faire). The results of a self-report survey of 141 students from two Chinese universities indicate that differences in family communication patterns are linked to the development of individuals’ communication traits. Specifically, the findings show that Chinese students from consensual and pluralistic families tend to be more argumentative than those from protective families. There is no significant difference in argumentativeness among students from consensual, pluralistic, and laissez-faire families. Implications of these findings are discussed.
Introduction

Traits and predispositions indicate individuals’ tendency to behave in certain ways, and they are “the fundamental building blocks of personality” (Santrock, 1991, p. 455). Communicators’ traits and predispositions “represent major dimensions of interpersonal functioning” (Beatty, 1998, p. 318), and understanding the communication behavior of others can be enhanced by knowledge of the communication traits and predispositions that individuals possess (Beatty, 1998; Infante & Rancer, 1996). Indeed, research employing a trait perspective has occupied a central place in the development of communication theory.

According to social learning theory, individuals’ environmental experiences influence the formation of their traits and predispositions (Santrock, 1991). The home is one of the most significant such social environments with which almost every one has had experiences. Child-development experts conclude that family dynamics play an important role on the type of person children will grow up into (Kantrowitz, 2004), and some individuals’ personal problems at adult stage can be attributed to the type of family they grew up from (Conlin, 2004). Specifically, parent-child communication has been considered “one of the most pervasive forces” that can affect individuals’ trait and personality development (Chaffee, McLeod, & Wackman, 1973, p. 349). Families develop different patterns of parent-child interpersonal communication, and these differences in family communication structure are “major and consistent” (p. 349).

Chaffee et al. (1973) first introduced the concept, family communication patterns (FCP), to study family communication structure. Since then, many studies have examined the relationships between family communication patterns and individuals’ trait formation and personality development, for example, FCP and communication apprehension (Elwood & Schrader, 1998; Hsu, 1998), FCP and unwillingness-to-communicate (Avtgis, 1999), FCP and self-monitoring, social desirability, desirability of control, self-esteem, self-disclosure, and shyness (Huang, 1999), and FCP and communication competence (Koesten, 2004). Most of studies, however, focus mainly on families and individuals in the American society. Few, if any, explores how family communication patterns are related to individuals’ trait development in other cultures.

Culture has been characterized by ways people engage in interpersonal communication. For instance, some cultures (e.g., American) are considered low-context and individualistic, in which people prefer explicit codes for communication, show a low tolerance for ambiguity, and perceive arguments in conversation as a positive way to deal with interpersonal conflict (Hall, 1976; Hofstede, 1980; Gudykunst, 1991; Rancer, Kosberg, & Baukus, 1992). Meanwhile, some other cultures (e.g., Chinese and Japanese) are viewed as high-context and collectivistic, in which people tend to use implicit codes for communication, emphasize social harmony, and consider arguments potentially harmful to personal friendships and, therefore, should be avoided (Hall, 1976; Gudykunst, 1991; Prunty, Klopf, & Ishii, 1990a, 1990b). It has become a tradition of the communication discipline to study traits related to interpersonal interactions in intercultural contexts, such as argumentativeness (Avtgis & Rancer, 2002; Prunty, et al., 1990a, 1990b; Suzuki, 1998), verbal aggressiveness (Avtgis & Rancer, 2002; Harmon, Klopf, & Ishii, 1990; Suzuki, 1998), communication apprehension (Burroughs & Marie, 1990; Klopf, 1997), rhetorical sensitivity (Knutson, Komolsevin, Chatiketu, & Smith,
2003), and willingness-to-communicate (Burroughs & Marie, 1990; Knutson, Komolsevin, Chatiketu, & Smith, 2002), to name just a few. These studies have shown that individuals of different cultures vary significantly on those traits. Because of the differences in cultural characteristics, the relationships between family communication patterns and individuals’ trait development may be different from one culture to another culture.

The present study focused on Chinese college students in Mainland China. Chinese college students of the late 1990s and the early 2000s is a unique social cohort that cannot be found anywhere in the world. First, the rapid development of Chinese economy has made their parents, as a whole, the richest generation in Chinese history. Materially, most of these parents didn’t have an enjoyable childhood, but they can now afford a living standard that is hundred times higher than that of the past. As a result, many children of this richest generation have been living a family environment that has a tendency to focus more on material satisfaction of children than on other aspects of children, such as the development of a sense of social responsibility and personality.

Second, many of these college students are from one-child family. In order to control the fast growing population, the Chinese government in 1979 implemented a national policy allowing each family to have only one child. Undoubtedly, these children generally receive more intensive parental attention and engage in more direct interactions with their parents than the generations before them. It is also true that the parents of one-child families may act in an overprotective way with their only child, thus, hindering his or her normal development of personality. The influence of the family environment on the personal development of this new generation has become a common focus for research across disciplines, for it is an issue related to the future of Chinese people and culture. The purpose of this study is to investigate the relationship between Chinese college students’ trait argumentativeness and their family interpersonal communication patterns.

Family Communication Patterns (FCP)

Chaffee, McLeod, and Wackman (1973) define two relations to describe the characteristics of family communication environment: social-oriented and concept-oriented. In social-oriented families, children are encouraged to develop and maintain harmonious relationships and to avoid any confrontation with their parents and others. In concept-oriented families, children are expected to openly express and discuss their ideas with any individuals, including their parents. As a result, children would be able to explore alternative viewpoints of controversial issues and to even actively engage in debate with those individuals. These two dimensions measure the differences of family communication patterns.

The socio-oriented and concept-oriented dimensions of family communication patterns further help categorize families into four different types: consensual, protective, pluralistic, and laissez-faire. According to Chaffee et al. (1973), “consensual families stress both types of relations” (p. 351), and children are “constrained to develop concepts that are consonant with the existing socio-relations” (p. 351) although they may be exposed to controversial issues and have different takes on them. Protective families show communication patterns that “… stress socio-relations at the expense of concept-
Children in protective families are discouraged from expressing different opinions on issues. Pluralistic families assume communication norms that “… emphasize the development of strong and varied concept-relations in an environment comparatively free of social restraints” (p. 351). Children from pluralistic families are encouraged to examine different ideas and to even reach a different conclusion from their parents on certain issues. Laissez-faire families “… emphasize neither type of relation” (p. 351). In other words, as shown in Figure 1, consensual families would be “high” for measures on both the socio- and concept-oriented dimensions; protective families would be “high” for measures on the socio-oriented dimension, but “low” on the concept-oriented dimension; pluralistic families would be “low” for measures on the socio-oriented dimension, but “high” on the concept-oriented dimension; laissez-faire families would be “low” for measures on both the dimensions.

Figure 1: A Two-dimensional Model of Family Communication Patterns*

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Concept-oriented Communication</th>
</tr>
</thead>
<tbody>
<tr>
<td>(High)</td>
<td>(High)</td>
</tr>
<tr>
<td><strong>Consensual</strong></td>
<td>“… families stress both types of relations.”</td>
</tr>
<tr>
<td><strong>Protective</strong></td>
<td>“… families stress social-relations at the expense of concept-relations.”</td>
</tr>
<tr>
<td>(Low)</td>
<td>(Low)</td>
</tr>
<tr>
<td><strong>Social-oriented Communication</strong></td>
<td><strong>Pluralistic</strong></td>
</tr>
<tr>
<td><strong>Laissez-Faire</strong></td>
<td>“…families emphasize neither type of relation.”</td>
</tr>
</tbody>
</table>

*: see Chaffee, McLeod, & Wackman, 1973, p. 351.

Family communication patterns traditionally have been assessed through the McLeod, Atkin, and Chaffee (1972, cited in Rubin, Palmgreen, & Sypher, 1994) Family Communication Patterns Scale. This scale includes ten items, five measuring the social-oriented dimension of family communication patterns and the other five measuring the concept-oriented dimension. Four family communication types are then formed by splitting the sample at the median scores on both socio-oriented and concept-oriented measurements. This self-report instrument measures the respondent’s perceptions of, and beliefs about, the existing family interaction patterns, or, what the respondent perceives or believes regarding how he/she interacts with other family members at home. Obviously, although they live together within the same family, these perceptions and beliefs can be different among family members (Ritchie, 1991; Ritchie & Fitzpatrick, 1990). These perceptions and beliefs help individual members of a family define and
make sense of the family “reality” in which they live. Their attitudes towards and their interactions with other family members are influenced by these perceptions and beliefs.

From a researcher’s viewpoint, it is almost impossible to know what exactly happens in each family day by day. What matters is what a member of the family perceives and believes regarding what it is going on. This perceived reality is the family environment that this member of the family believes he/she lives within. Each member of the family may have different descriptions of the family environment of the very same family. Specifically, for children in the family, it is the family environment as perceived by them that eventually can have an impact on the development of their personality traits. Therefore, the family communication patterns measured by children’s self-report using the two dimensional scale are a meaningful representation of the characteristics of family environment.

Based on the two dimensions, a line of research on family communication patterns shows social- or concept-oriented families relate differently to the levels of children’s interest in public affairs and political knowledge, and children in different family environments demonstrate different behaviors regarding their media usage, product brand selection, and career decisions (Ritchie & Fitzpatrick, 1990). For example, regarding individuals’ engagement of political communication such as discussion with friends and campaign activities, Chaffee et al. (1973) reported that adults and children from pluralistic families showed a higher level of political engagement than those from the other three types of families, and, specifically, those from protective families had the lowest level of such an engagement. Abel (1976) found that television viewing preferences of children in high socio-oriented families are similar to what they believe their parents want them to watch. He argued that this finding may be a result of communication restrictions imposed by parents on children in such a family environment in which children tend to have “less opportunity to encounter information at variance with parental views” (p. 332). Chan and McNeal (2003) also found that parents in protective Chinese families tend to exercise more control over children’s television viewing than those in pluralistic Chinese families.

Regarding the relationship between family communication patterns and communication traits, Elwood and Schrader (1998) studied the levels of communication apprehension (CA) among college and middle school students in relation to both “conformity-oriented” (similar to socio-oriented) and “conversation-oriented” (similar to concept-oriented) dimensions. The findings of their study indicated that the levels of communication apprehension (CA) in the interpersonal and group contexts are negatively related to the measures of conversation-orientation of family. In other words, students, regardless of the level of their study (college or middle school), tend to have lower levels of communication apprehension in the two contexts if they come from a highly conversation-oriented or concept-oriented families. Hsu (1998) also reported that levels of communication apprehension were positively related to the conformity-oriented or socio-oriented families, and they were in a negative relation to the conversation-oriented or concept-oriented families. In addition, Hutchinson and Neuliep (1993) also found a moderate relationship between children’s levels of CA and the scores of parental modeling (through which children imitate the communicative behavior of their parents to gradually develop their own). Thus, the studies summarized above suggest that family
communication environment contributes to the development of children’s communication personality traits.

**Argumentativeness**

Individuals engage in arguments in various social contexts for different reasons. The trait of argumentativeness has been found to be a significant predictor of actual argumentative behavior (see, Infante & Rancer, 1996, Rancer & Avtgis, 2006). Argumentativeness is a trait “… which predisposes the individual in communication situations to advocate positions on controversial issues and to attack verbally the positions which other people take on these issues” (Infante & Rancer, 1982, p. 72).

Argumentativeness (ARGgt), according to Infante and Rancer (1982), consists of two motivational tendencies: the tendency to approach arguments (ARGap), and the tendency to avoid arguments (ARGav). The interaction of these two competing components defines individuals’ level of argumentativeness. In other words, ARGgt = ARGap – ARGav. ARGgt is measured by a 20-item self-report scale, ten of the items measuring ARGap and another ten measuring ARGav. Therefore, a highly argumentative individual would have a high score on ARGap and a low score on ARGav. A low argumentative individual would register a low score on ARGap and a high score on ARGav. A moderate argumentative individual would have approximately equal scores on both ARGap and ARGav. Specifically, if an individual has low scores on both ARGap and ARGav, s/he is considered “apathetic moderate” (Infante, 1982, p. 142); if an individual has high scores on both ARGap and ARGav, s/he is considered “conflicting feelings moderate” (p. 142).

Argumentativeness as a communication trait has been a focus of many studies and its relation to other personality traits has been investigated in a large amount of research (Infante, Rancer, & Womack, 2003; Rancer & Avtgis, 2006). For example, Chen (1994) examined the relationship between argumentativeness and social desirability of college undergraduate students. He found that those individuals with high levels of social desirability would be less argumentative in social interaction. Nussbaum and Bendixen (2003) reported a significant relationship between individuals’ extraverted personality traits and argumentativeness.

Individuals’ trait argumentativeness has also been linked to the characteristics of family environment. Infante (1982) identified two of such characteristics: birth order and family size. He argued that firstborns in family tend to be “more motivated to achieve, competitive, and leadership oriented” (p. 143), and, therefore, they are more argumentative. Also, “the more children in a family the more potential for social conflict, [and,] thus, the more opportunity to develop an argumentativeness” (p. 149). However, the findings show that only the birth order is significantly associated with argumentativeness. In addition, Bayer and Cegala (1992) found that parents’ trait of argumentativeness is related to the patterns of their parenting style. Parents high in trait argumentativeness are likely to have “autonomy-love” style with which parents show their support and express their affection for children, and, at the same time, encourage children to be independent. Parents with this style are considered an “authoritative parent” who themselves “tend to be good arguers” (p. 303), and they “are more likely to accept a child’s reasonable argument” (p.303).
Argumentativeness has also been studied in different cultural contexts. Suzuki and Rancer (1994) examined the conceptual and measurement equivalence of the Argumentativeness Scale used in Japan. They reported that the translated ARG scale can be applied to Japanese sample. Prunty, Klopf, and Ishii (1990a, 1990b) and Suzuki (1998) also found that American students show higher scores on argumentativeness (ARGgt) than Japanese students.

Taken together, this corpus of research suggests that family environment influences children’s communication personality traits, and different family communication patterns promote different interaction styles among children when they engage in arguments. Specifically, children from highly concept-oriented families should develop different levels of argumentativeness than those from highly socio-oriented families. Based on these findings, the following hypotheses are forwarded:

H1: Individuals from consensual families have significantly higher scores on argumentativeness than those from protective families.
H2: Individuals from consensual families have significantly higher scores on argumentativeness than those from laissez-faire families.
H3: Individuals from pluralistic families have significantly higher scores on argumentativeness than those from protective families.
H4: Individuals from pluralistic families have significantly higher scores on argumentativeness than those from laissez-faire families.

Method

Participants

The participants of this study consisted of 165 undergraduate college students from two Chinese universities in the largest city located in Southern China. Although the questionnaires used in the study were distributed by the instructors in different classes, students in the classes participated voluntarily in the study. There were 141 completed questionnaires returned, and they were used for the data analysis. Among those who provided completed responses to the questionnaires, 96 were male, and 45 were female. The average age of these 141 participants was 21 (SD = 1.15). Their ages ranged from 18 to 24 (all of them born after 1979 when the “one-child” policy was implemented in China).

Instrumentation

Family communication patterns were assessed through a Chinese version of the McLeod, Atkin, and Chaffee (1972, cited in Rubin et al., 1994) Family Communication Patterns Scale. This scale includes ten items, and five each measure one dimension of family communication patterns. The items used 4-point responses (i.e., ranging from 1/“never happen” to 4/“often happen”) to assess frequency of a form of family communication. For example, one item measuring the socio-oriented dimension states, “your parents say that their ideas are correct, and you shouldn’t argue with them.” One
of the items concerning the concept-oriented dimension states, “your parents say that getting your ideas across is important, even if others don’t like it.”

Argumentativeness was measured by using a Chinese version of the Infante and Rancer (1982) Argumentativeness Scale. This scale has 20 items presented in a 5-point Likert-type format (i.e., ranging from 1/“almost never true” to 5/“almost always true”), ten each focusing on tendency to approach argument and tendency to avoid argument. The general tendency (ARGgt) to argue is computed by subtracting the total of the individuals’ scores on the 10 ARGap items from that of the 10 ARGav items.

**Translation Procedures for the Scales.** The Family Communication Patterns Scale was first translated by the first author from English to Chinese, and two bilingual research assistants then back-translated it into English. Any discrepancies in the two-step translation process were discussed. Since each item of the Scale measures the frequency of one specific and common communication behavior in people’s daily life, very few discrepancies were identified. All individuals involved in the translation found that the discrepancies were insignificant in terms of the meaning of the statements and the conceptual and measurement equivalence was well maintained.

The Argumentativeness Scale was first translated by a bilingual research assistant from English to Chinese. The translation was then compared to another Chinese version of the Scale provided by the second author of the current study. This Chinese version of the Scale was obtained from a published Chinese textbook on interpersonal communication (DeVito, 1998). Since the comparison showed no significant discrepancy between the former and the latter, the former version was used in the questionnaires.

**Results**

**Measurement reliability**

**Family Communication Patterns.** Reliability for the 5-item measure of socio-oriented family communication pattern ($M = 11.04, SD = 2.83$) was .64 (Cronbach’s alpha). The higher the score, the stronger the socio-orientation a family tends to have. The 5-item measure of concept-oriented family communication pattern ($M = 13.24, SD = 3.34$) revealed a reliability of .74 (Cronbach’s alpha). The higher the score, the stronger the concept-orientation a family tends to have. Following the method used in Chaffee et al. (1973), four family communication types were then formed by splitting the sample at the median scores on both socio-oriented and concept-oriented measurements (as shown in Figure 1), and the median scores were 11 and 14, respectively.

**Argumentativeness.** The ten ARGap items ($M = 34.62, SD = 6.31$) showed a reliability of .84 (Cronbach’s alpha), while reliability for the ten ARGav items ($M = 24.96, SD = 5.23$) was .72 (Cronbach’s alpha).

**Analysis**

A one-way analysis of variance (ANOVA) was conducted to test the hypotheses. As shown in Table 1, this analysis revealed a significant difference on individuals’ scores
Table 1: ANOVA Summary Table for Argumentativeness Among Four Types of Family

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type of family</td>
<td>3</td>
<td>840.05</td>
<td>280.01</td>
<td>3.05*</td>
</tr>
<tr>
<td>Within group</td>
<td>137</td>
<td>12561.61</td>
<td>91.69</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>140</td>
<td>13401.66</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note: N = 141.

* p < .05

on argumentativeness among four types of family environment, $F(3, 137) = 3.05, p < .05$. Specifically, further pairwise comparisons (as shown in Table 2) showed significant differences on individuals’ scores on argumentativeness between consensual ($M = 12.45, SD = 1.51$) and protective families ($M = 6.32, SD = 1.57$), $p < .01$, and between pluralistic ($M = 11.22, SD = 1.72$) and protective families, $p < .05$.

Table 2: Pairwise Comparisons for Argumentativeness Among Four Types of Family

<table>
<thead>
<tr>
<th>Family Type</th>
<th>N</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consensual</td>
<td>40</td>
<td>12.45**</td>
<td>1.51</td>
</tr>
<tr>
<td>Pluralistic</td>
<td>31</td>
<td>11.23*</td>
<td>1.72</td>
</tr>
<tr>
<td>Protective</td>
<td>37</td>
<td>6.32</td>
<td>1.57</td>
</tr>
<tr>
<td>Laissez-faire</td>
<td>33</td>
<td>8.55</td>
<td>1.67</td>
</tr>
</tbody>
</table>

** p < .01 when compared to “Protective”; * p < .05 when compared to “Protective”

Discussion

The results indicate that both Hypothesis 1 and 3 are supported, and Hypothesis 2 and 4 are not supported. Therefore, students from either consensual or pluralistic families tend to be more argumentative than those from protective families. There were no significant differences in argumentativeness among students from consensual, pluralistic, and laissez-faire families. These findings provide a first glance at the relationships between family communication patterns and personality trait of argumentativeness for contemporary Chinese college students.
The differences on these patterns constitute different family environments that can have an impact on the development of children’s personality traits. In pluralistic families, members are encouraged to participate in the family decision-making process, to explore controversial matters, and to convey their feelings and opinions with an open mind. Conversely in protective families, obedience, conformity, and social harmony are valued and protected, and members feel great pressure if they confront others with different viewpoints. Therefore, it is not surprising that students from pluralistic families would show a higher level of argumentativeness than those from protected families.

Consensual families stress both social harmony and openness on debating controversial issues. On the one hand, members of the consensual families are encouraged to actively engage in any discussion. On the other hand, in order to maintain the harmony, they also express desire to avoid any confrontation with others. Despite the fact that students from consensual families have to interact with others in such a complex manner, they are more argumentative than those from protected families. One possible explanation for this finding is that, for students from consensual families, sharing their own opinions on controversial issues and discussing or even debating them in an explicit manner with others does not necessarily result in creating social disharmony. It is possible that how to argue is more influential than whether to argue in the process of developing the argumentative trait.

The relationships of family communication patterns and the trait of argumentativeness have several implications for Chinese children’s overall development. Guided by Confucius’ principles, in social contexts Chinese individuals are expected to respect authoritative figures, and, in family settings, children are expected to show obedience to parents and any arguments with their parents are discouraged. Chinese parents are inclined to create a family environment that is highly socio-oriented (Nisbett, 2006), and this type of family environment may dampen children’s development of argumentativeness trait.

In the Western society, argumentativeness has been linked to several positive outcomes in the settings of social interaction, for example, highly argumentative individuals are perceived as more credible than less argumentative persons (Infante, 1985). Thus, argumentativeness is generally considered a socially desirable trait. Since 1979, China has gradually adopted the Western-style market economy and has seen a tremendous increase of cultural interactions between Chinese people and people from the rest of the world through various venues, such as mass media, the Internet, and business- and tourism-related interpersonal contacts. This new social environment presents many characteristics similar to those in the Western society. Thus, being argumentative could be very desirable for Chinese youths. Therefore, in order to help their children to develop a higher level of this trait of argumentativeness, those Chinese parents need to adopt new parenting styles—what they cannot learn from their own parents and what may sometimes deviate from the traditional cultural practice. These new styles need to emphasize the concept-orientation of family interaction. Moreover, research shows that members of highly concept-oriented families demonstrate less communication anxiety in interpersonal and group settings (Elwood & Schrader, 1998). Children can also benefit from the highly concept-oriented family structure that helps control the development of a socially undesirable trait—communication apprehension.
Some research suggests that communication between parents and their children is influenced by both the constructive trait of argumentativeness and the destructive trait of verbal aggressiveness. Bayer and Cegala (1992) investigated parenting style, and discovered that parents with an “authoritative” style (e.g., used reason with their children, encouraged give-and-take) were higher in argumentativeness and lower in verbal aggressiveness. Conversely, parents with a more “authoritarian” style (e.g., discouraged verbal communication from children, used more unilateral control-oriented communication) were lower in argumentativeness and higher in verbal aggressiveness. This is important in a child’s development as Bayer and Cegala (1992) suggest that the development of positive self-concepts in children has been negatively associated with authoritarian-style reasoning.

There is one possible explanation on why there is no difference on argumentativeness among students of consensual, pluralistic, and laissez-faire families. In laissez-faire families, members do not follow any consistent communication patterns and there may be very little interaction between children and their parents (Ritchie & Fitzpatrick, 1990). However, they are not prohibited from challenging others on any issue. Because of this practice, conceptually, these students from laissez-faire families are not confined to certain norms like those in protective family environment, and, thus, they may become relatively high argumentative people.

One major limitation of the study is caused by the use of the conventional method to determine the four family communication patterns. Two of the four dimensions defined by Hofstede (1980) to describe the major characteristics of different cultures are individualism/collectivism and power distance. Chinese culture is highly collectivistic and with a large power distance. Therefore, conceptually, Chinese families are likely to be highly socio-oriented and less concept-oriented. Based on this analysis, we should expect to see a large number of families with one of the four communication patterns. However, in the current study the four family communication patterns were determined by simply splitting the sample at the median on both socio-oriented and concept-oriented measurements, and, in so doing, the numbers of four family patterns were very close to each other. In other words, the number of the families in one or two of the family types may be inflated, and that of the remaining family types may be fewer than it should be. Although it is the procedure most frequently employed to identify family communication patterns (Chaffee et al., 1973; Liebes & Ribak, 1992; Pingree, Hawkins, & Botta, 2000; Chan & McNeal, 2003), this procedure may lead to few inaccurate assignments of Chinese families into one of the four family communication patterns.

The current study provides only one snapshot of the relationships between family communication patterns and argumentativeness trait. In order to understand these relationships from a different vantage point, future research should examine the relationships between family communication patterns and other communication traits, such as verbal aggressiveness. From a developmental perspective, these relationships can change and they depend on the life stages on which parents and children are living. Therefore, future longitudinal studies may provide an on-going understanding of the dynamics of these relationships.
References


Infante, D. A. (1985). Inducing women to be more argumentativeness: source credibility
effects. *Journal of Applied Communication Research, 13*, 33-44.


Predicting Physician Communication Competence by Patient Perceived Information Exchange and Health Locus of Control

Theodore A. Avtgis, Ph.D.
West Virginia University
Theodore.avtgis@mail.wvu.edu

E. Phillips Polack, M.D.
Plastic Surgery Incorporated

Theodore A. Avtgis (Ph. D., 1999, Kent State University) is an Associate Professor of Communication Studies, West Virginia University, PO Box 6293, 108 Armstrong Hall, Morgantown, WV 26506. E. Phillips Pollack M.D. is a surgeon and owner of Plastic Surgery Incorporated, 40 Medical Park, Suite 200, Wheeling, WV 26003.
Abstract

This study examined the impact of information exchange and patient health control expectancies on perceptions of physician communication competence. One hundred ninety-nine patients completed measures of information exchange, health control expectancies and perceived physician communication competence while waiting to see a physician. Results indicated that patient perceived relationship quality is a strong predictor of physician communication competence. The results indicate the need for researchers to account for contextual factors surrounding the medical encounter to better explain the patient/physician relationship.
Introduction

The investigation of health-care provider communication competence and skill is still a relatively new endeavor for social scientists. In less than two decades, scholars have amassed a plethora of findings indicating the benefits of competent and skillful communication on the part of both patient and provider (see Thompson & Parrott, 2002). One of the motivating factors in the investigation of the patient-provider relationship lies in the bottom line outcomes for the physician. For example, Fielding (1997) found that of patients who filed suit against their physician, 68% cited communication related causes (e.g., lack of empathy, poor sender and/or receiver oriented communication skills etc.). The perceived wrong, in this case, is not in the practice of medicine as much as in the practice of communication. This is exemplified in a study conducted by Cole (1997) indicating that of the 1% of patients who develop medical complications due to negligence, only 3% of those actually filed law suits.

The specific behaviors that constitute competent communication have never been standardized across researchers but particular molecular behaviors have been identified to statistically differentiate patients that sue from those who do not. More specifically, physicians who serve as health educators (as opposed to simply relaying diagnostic information), utilize appropriate humor expression, encouraging patient input and feedback, and use clarification strategies to ensure proper perspective taking experience less malpractice litigation (Levinson, Roter, Mullooly, Dull, & Frankel, 1997). These are but a few of the micro-behaviors that constitute competent physician communication.

There is still varying perspectives as to whether effective communication is a function of physician personality characteristics (Horsfall, 1998) or a function of adapting to the contextually bound “type” of medicine being practiced (Tickle-Degnen, 1998). For example, communication skills required as an oncologist should differ from those of a general internist. However conceptualized, the notion of physician communication competence is primarily a perceptual construct that is determined by self-report or more importantly, with regard to outcomes such as litigation and treatment satisfaction, the patient’s perspective (Fielding, 1997; Koehler, Fottler, & Swan, 1992).

Information Exchange and Perceived Control

Efforts focusing on patient competence with regard to message exchange have garnered some attention from researchers. In fact, information giving has been of particular focus for scholars (see Thompson & Parrott, 2002). Blum and Blum (1991) report that the exchange of information is most important during specific aspects of the treatment experience such as disease diagnosis, disease progression, and pain management. In accounting for patient communication characteristics and information giving, Street (1991) found that patients who express more negative affect toward the encounter actually receive more information.

The effective exchange of information is believed to be a primary function of the medical interview (Cegala, 1997). Cegala, McGee, and McNeilis (1996) found that information exchanged between physician and patient takes one of four forms consisting of seeking information (i.e., communication messages and strategies designed to acquire new medical information), giving information (i.e., revealing or disclosing information about physical, cognitive, or affective states), verifying information (i.e., engaging in communication exchanges designed to increase understanding or clarification), or socio-
emotional support (i.e., communicating to provide comfort or caring for the other person) (Cegala, 1997; Cegala, & Broz, 2003; Johnson, 1996).

More recently, Avtgis, Brann, and Staggers (2006) studying health control expectancies and information exchange found that the specific reason for the medical interview (i.e., medical context) influences the types of information that people exchange. More specifically, when in an emergency room interview, patients who have internal control expectancies report high levels of information giving and information verifying whereas in the scheduled visit context, patients high in chance control reported giving little information to the physician. As this and a myriad of other studies indicate (see Brenders, 1989), patient expectancies for health control have a great impact on other perceptual constructs.

Health control expectancies have been of interest to researchers in explaining how patients react to a variety of medically related phenomena (e.g., intervention, diagnosis, treatment, etc.). Health locus of control researchers primarily distinguish between internal control (i.e., patients who believe they are an active agent in their treatment and overall health), chance control (i.e., patients believe that luck or fate are the primary determinants of health), and powerful other control (i.e., patients believe that doctors, nurses, pharmacists etc. control health outcomes) (Lefcourt, 1981).

Research has focused on how perceived health control influences message centered constructs. More specifically, seeking, assimilating, and retaining information accounts for most of these efforts (see Brenders, 1989). Overall, results show the proactive nature of people with internal health control expectancies regarding the information seeking (DeVito, Bogdanowicz, & Reznikoff, 1982; Wallston, Maides, & Wallston, 1976).

The current study sought to investigate how patient personality characteristics toward health (i.e., health locus of control) combined with perceived behavior (i.e., information exchange with physicians) influence how patients perceive the communication competence of physicians in general. Therefore, the following hypotheses were forwarded:

H1a: Belief in internal and powerful other health control expectancies will significantly predict increased physician communication competence.
H1b: Belief in chance health control expectancies will significantly predict decreased physician communication competence.

H2: Increased levels of information seeking, information giving, information verification, and socio-emotional support will significantly predict increased physician communication competence.

Method

Participants

Participants in this study completed the Multidimensional Health Locus of Control Scale (Wallston, Wallston, & DeVellis, 1978), the Cegala, Coleman, and Turner (1998) Medical Communication Competence Scale (MCCS), the Communication Competence Scale (Wiemann, 1977), and a set of demographic questions.
Two hundred patients waiting for medical treatment from a plastic surgery group participated in this study. More specifically, 63 men (31.7%) and 133 (66.8%) women participated in this study. Four people (1.5%) did not indicate sex. The mean age of the patients was 47.12 years ($SD = 17.5$) and the ages ranged from 4 years to 85 years.

**Procedures**

Data collection occurred at a plastic surgery facility in the mid-western United States. This organization is predominately a reconstructive plastic surgical group, more closely paralleling a general surgical practice than a cosmetic surgical practice with a strong emphasis on hand surgery.

Patients for the current investigation were asked upon check-in to the medical facility if they would be willing to complete a series of questionnaires regarding patient-physician interaction while waiting for treatment. In the case of under-aged patients, parents/guardians were asked to orally administer the questionnaire. Upon agreement to participate, each patient was provided with materials (cover letter, and measures) as well as an envelope (with no marks as to identify the specific patient) that was to be sealed upon completion of the questionnaire and dropped off in a secured location. This resulted in 200 complete questionnaires.

**Instrumentation**

The Wallston et al. (1978) Multidimensional Health Locus of Control Scale (MHLC) is a three dimension, 36-item measure presented in a 5-point Likert-type format with responses ranging from 1: *strongly disagree* to 5: *strongly agree*. The measure is comprised of three health control dimensions of internal control, chance control, and powerful other control. Cronbach alpha estimates for the internal, chance, and powerful other dimensions were .86 ($M = 30.15$, $SD = 6.17$), .81 ($M = 40.25$, $SD = 6.97$), and .83 ($M = 36.52$, $SD = 7.36$) respectively.

The Medical Communication Competence Scale (MMCS) developed by Cegala et al. (1998) is a four dimension, 16-item measure presented in a 5-point Likert-type format ranging from 1: *strongly agree* to 5: *strongly agree*. The MMCS contains dimensions of information seeking, information giving, information verification, and socio-emotional support. Cronbach alpha estimates for the four dimensions were .87 ($M = 5.81$, $SD = 2.19$), .90 ($M = 9.87$, $SD = 3.18$), .90 ($M = 8.94$, $SD = 3.25$), and .78 ($M = 3.33$, $SD = 1.19$) respectively.

The Communication Competence Scale (Wiemann, 1977) is a uni-dimensional measure of general communication competence. The 36-item, uni-dimensional measure is presented in a 5-point Likert-type format ranging from 1: *strongly disagree* to 5: *strongly agree*. The directions of this measure were altered to instruct the person to reflect on “physicians in general.” Cronbach alpha estimate for this study was .96 ($M = 84.33$, $SD = 19.78$).
Results

Table 1 shows the results of the hierarchical multiple regression analyses. In the regression model, locus of control dimensions (i.e., internal control, chance control, and powerful other control) were entered as the first block of variables followed by information exchange dimensions (i.e., information giving, information verifying, information seeking, and socio-emotional support) which were entered as the second block of variables. Given the number of variables involved in the analyses, hypotheses were tested using 0.01 as a corrected alpha.

Hypotheses One predicted that belief in internal or powerful other health control would significantly predict a patient’s perception of increased physician communication competence. The hypotheses also predicted that belief in chance control will significantly predict a decrease in physician communication competence. The second hypothesis suggested that increased levels of information exchange would be a predictor of increased physician communication competence. Results of the multiple regression analyses indicated that patient health locus of control was a statistically significant predictor of physician communication competence ($F[3, 195] = 19.46$, $R^2 = .23$, $p < .001$) with internal control ($\beta = .24$, $t [199] = 3.60$, $p < .01$) and powerful other control ($\beta = .31$, $t [199] = 4.31$, $p < .01$) contributing significantly to the equation. Chance control ($\beta = .06$, $t [199] = .89$, $p = .38$) did not contribute to the equation. When the second block of

### Table 1: Zero-Order Correlations among Health Locus of Control, Information Exchange, and Doctor Communication Competence

<table>
<thead>
<tr>
<th>Variable</th>
<th>1</th>
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<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Intloc</td>
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<td>.26**</td>
<td>.27**</td>
<td>.20*</td>
<td>.28**</td>
<td>.19**</td>
<td>.31**</td>
<td>.26**</td>
</tr>
<tr>
<td>2. Chanloc</td>
<td>--</td>
<td>.45**</td>
<td>.08</td>
<td>.02</td>
<td>.10</td>
<td>.02</td>
<td>.19**</td>
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</tr>
<tr>
<td>3. Powloc</td>
<td>--</td>
<td>.23**</td>
<td>.06</td>
<td>.15*</td>
<td>.13</td>
<td>.32**</td>
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<td>4. Infoseek</td>
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<td>.57**</td>
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<td>5. Infogiv</td>
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<td>6. Infover</td>
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<td>7. Rel</td>
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<td>8. Comp</td>
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*Note: Intloc = Internal health locus of control; Chanloc = Chance health locus of control; Powloc = Powerful other health locus of control; Infoseek = Information seeking; Infogiv = Information giving; Infover = Information verification; Rel = Relationship quality; Comp = Perceived doctor communication competence. * = $p < .05$, ** = $p < .01$. 
variables (information exchange variables) were entered into the equation, the resultant model significantly improved the predictability of physician competence ($F[7, 191] = 82.86, R^2 = .75, p < .001; \Delta R^2 = .52$) with powerful other control ($\beta = .13, t[199] = 3.10, p < .01$) and the socio-emotional dimension of information exchange ($\beta = .71, t[199] = 16.51, p < .001$) significantly contributing to the equation accounting for 75 percent of the variance. Internal control ($\beta = .03, t[199] = .68, p = .50$), chance control ($\beta = .04, t[199] = .95, p = .35$), information giving ($\beta = .03, t[199] = .52, p = .61$), information verification ($\beta = .03, t[199] = .38, p = .71$), and information seeking ($\beta = .10, t[199] = 1.64, p = .10$) did not significantly contribute to the equation. Therefore, the hypotheses received partial support.

**Discussion**

Overall, the findings of the study reveal interesting links among perceptions of control and relationship quality and physician communication competence. The belief in powerful other and internal control accounted for 23% of the variance in the prediction of physician communication competence. Past research has linked the belief in internal control to general relational satisfaction as well as other health benefits (see Benders, 1987, 1989). Powerful other control, especially when faced with the uncertainty of health-related issues, has a similar effect on perceived physician competence as that of internal control. Perhaps that in the context of the patient physician relationship or, more specifically, a corrective surgery situation, powerful other control may take the form of secondary control (Rothbaum, Weisz, & Snyder, 1982). That is, fitting in with the wishes or advocations of another (i.e., physician) affords the patient a degree of control in an otherwise uncontrollable situation. The influence of variables unique to the medical situation/context has been shown to confound health communication research (Avtgis et al., 2006; Tickle-Degnen, 1998).

In a sense, the patient yielding control to the physician assumes that the powerful other (i.e., the physician) has a degree of medical expertise/competence. Patients’ perceptions of relational/communicative aspects of the relationship have been shown to have direct effects on perceptions of physician medical skill, expertise, and actual malpractice litigation (Cole, 1997; Fielding, 1997; Levinson et al., 1997). Therefore, the belief in powerful other control in this case, results in increased perceptions of communication competence.

Perhaps the most enlightening finding is that of patient perceived socio-emotional support and powerful other control accounting for 75% of the variance of physician communicative competence. This finding indicates that relational aspects unique to the patient and physician can actually overwhelm the more global personality predisposition of the actors. That is, regardless of a patient’s belief in control over general health issues, yielding control to the physician coupled with an increased perception of support from the physician stifle the effect of more general health control expectancies in the prediction of physician communication competence. This notion of situation or context specific factors accounting for more variance than global perceptions is well documented in the social sciences (Avtgis et al., 2006, Benders, 1989, Lefcourt, 1981; Tickle-Degnen, 1998).
Taken as a whole, patient perceived relational quality with physicians’ are stronger predictors of physician competence than any other aspect of information exchange or (with exception to powerful other control making a statistically significant but unremarkable contribution) health control expectancies. Future research should focus on specific contextual/situational influences that exist within the more global context of patient/physician interaction.
References


Student Respect for a Teacher: Measurement and Relationships to Teacher Credibility and Classroom Behavior Perceptions

Alma D. Martinez-Egger
University of North Texas

William G. Powers
Texas Christian University

Alma D. Martinez-Egger (M.S., University of North Texas, 2003). The McNair Scholars Program at Texas Christian University partially supported work on this research. William G. Powers (Ph.D., University of Oklahoma, 1973) is a Professor in the Department of Speech Communication, Texas Christian University, Fort Worth, TX 76129, (817/257-7610) w.powers@tcu.edu.
Abstract

This study developed a measure of student’s respect for teachers. A parsimonious, single-factor solution for Student Respect for a Teacher (SR-T) was produced and internal reliability demonstrated. The validity of SR-T was demonstrated through substantial correlations between SR-T and student reports of teacher credibility (competence, character, and caring) and the student’s attitudinal evaluation of the targeted teacher. Additionally, SR-T was moderately and significantly correlated with two of three measures of self-reported behavior and with student perceptions of the behavior of the target teacher. On this basis the SR-T was determined to be a reliable and valid measure of student respect for a teacher in the college environment. Future research is discussed.
Introduction

Students communicating levels of disrespect for a teacher has long been a concern for teachers and administrators around the nation (e.g. De Lucia & Iasenza, 1995; Friedman, 1994; Tom, 1998). While the majority of the concern has focused upon communication-oriented behaviors in the elementary and secondary educational levels (i.e. Friedman, 1994; Scott, 1999; Yelsma & Yelsma, 1998), there is clear evidence of an emerging concern at the higher education level, "...college faculty have become increasingly concerned about student disorder and classroom management." (De Lucia & Iasenza, 1995, p. 385). In spite of the obvious educational significance for both the teacher and the student (Scott, 1999) that is inherent to a student’s respect for a college teacher, there have been no measures of such respect developed.

The current study focuses upon developing such a measure and conceptually defines student respect for teachers as the degree of regard held by a student for an instructor engaged in the teaching profession. The concept of degrees of respect for a teacher exists at all educational levels and would be related to and at least minimally predictive of other cognitions of a teacher and associated communicative outcomes. For example, a student’s respect for a teacher would logically have an impact upon a student’s behavior toward and communication with that teacher during classroom interactions, office interactions, hallway interactions, as well as student interactions with other teachers, administrators and other students, about that teacher. The importance of learning more about student respect cannot be underestimated.

Measurement of Respect for Teachers

The limited number of measurement tools associated with student respect for teachers have focused on summative reports of respect-oriented behaviors rather than student cognitions. Thus, one is limited to addressing issues of student respect only after the student has behaved in a clear, consistent disrespectful manner. For example, Yelsma and Yelsma's (1998) scales for evaluating social respect (including teachers) uses research subjects from high school and items focused upon "respectful social behaviors," not a measure of cognitions reflecting respect for a teacher (Yelsma & Yelsma, 1998, p. 434). Scott (1999) explores respect in the "socio-moral atmosphere" (p. 31) of students in secondary Christian schools and assesses the level of agreement upon specific disrespectful and respectful behaviors of both students and teachers by both students and teachers but did nothing to measure the cognitions representing the students feelings associated with respect for teachers. Having access to student levels of respect for a teacher allows one to predict potential behavior as well as related perceptions that may have influence upon the learning process.

Several researchers explore related cognitions in efforts to predict student behavior frequently associated with respect. Richmond (1990) contends that “meanings in the mind of students” are important to the analysis of the students’ behaviors (pg. 193). Also, Ledez (1994) refers to respect as the “inner essence of the individual” (pg. 5). Friedman (1994) suggests that students behave according to how they feel internally and describes disrespect as “lacking respect” (pg. 949) that fosters “internal and external maladaptive behaviors” (pg. 957). A continuing concern is the “favorabl[e] or unfavorabl[e]” (Gass & Seiter, 1999, pg. 41) frame of actions that are representative of a dichotomy of the respect and disrespect cognitions (Friedman, 1994; Friedman, 1995; Scott, 1999; Yelsma and Yelsma (1998). The specific relationship of
student perceptions and feelings relative to impacting student behaviors has been well documented (Frymier & Thompson, 1992; Teven & McCroskey, 1996; Tom, 1998). There appears to be clear evidence of the associations between such logically related variables as teacher credibility, teacher behavior, and student behaviors (Frymier & Thompson, 1992; Kearney, Plax, Hays, & Ivey, 1991; Tevan & McCroskey, 1996; Thweatt & McCroskey, 1998; Tom, 1998). Certainly, development of a measure of student respect for a teacher has complementary heuristic value. Exploration of causative factors that impact a student’s respect for a teacher or teachers (e.g. home environment, student culture, student experience, etc.) cannot be explored until a reliable and valid measurement tool is developed. On that basis, the need for a measurement of student respect for teachers is clear. Thus, the following research question was pursued in this study:

Research Question: To what extent can a reliable and valid measure of student respect for a teacher be developed?

Convergent Validity

Related Cognitions: To evaluate the validity of this measure, the association of a student’s respect for a teacher and the student’s view of the teacher’s credibility are examined. Given the conceptual definition of student respect for a teacher as a broad-based sense of regard for that person, an association with cognitions of credibility has evident face validity.

There is also a strong logical association between teacher respect and each of the dimensions of credibility (competence, character and good will) demonstrated by previous research in related areas. For example, Ledez (1994) associates teacher competence and respect for the authority figure by indicating that for students to respect the authority figure of teacher, students must perceive the teacher as competent. Thus, there would be a positive relationship between student perceptions of teacher competence and other student evaluations of the teacher such as respect (Beatty & Zahn, 1990; Cohen, 1981; Erdle, Murray, & Rushton, 1985).

Trustworthiness or character, should also be associated with teacher respect. Thweatt & McCroskey (1998) report that teacher trustworthiness is considered the essence of teacher character. The association of a student’s respect for a teacher and the student’s projection of the character or trustworthiness of that teacher is self-evident. Trustworthiness/character was related to teacher competence (Frymier & Thompson, 1992) where "character involved how much a person is liked, respected, and admired" (p. 388) and clearly related to teacher respect as defined in this study.

Hersrud (1994) defines respect as "warmth and caring connoted by positive regard" (p. 49) clearly establishing an association to the good will (or caring) dimension of credibility. Furthermore, Teven and McCroskey (1996) argue that caring is directly associated with good will and has a positive impact on affective learning, cognitive learning and the students' teacher evaluation. Therefore, the caring dimension of credibility should be strongly associated with respect. On that basis, the following hypotheses were examined as part of the validity evaluation measurement of student respect for a teacher.

H 1: Student respect for a teacher will be positively correlated with student projection of teacher competence.
H 2: Student respect for a teacher will be positively correlated with student projection of teacher character.
H 3: Student respect for a teacher will be positively correlated with student projection
of teacher goodwill/caring.

Finally, based upon the preceding literature, the validity of the measurement of a student’s cognitive respect for a teacher would logically be highly associated with an established measure of their evaluative attitude toward that teacher. Thus the following hypothesis was generated:

H 4: Student respect for a teacher will be positively correlated with their evaluation of that teacher.

Related Behavioral Self-Reports and Perceptions

There is extensive research that identifies student respectful and disrespectful behaviors, however without an adequate measure of cognitive respect little direct research support was located. There is a consistency between general cognitions and behaviors that permeates the logic underlying all hypotheses testing the validity of the measurement of respect. Behaviors are not random events but rather are preceded by some combination of cognitions that precipitate the behavioral decision. Abelson, Aronson, McGuire, Newcomb, Rosenberg, and Tannenbaum (1968) provide an excellent overview of numerous theoretical models of consistency supporting this contention that have not changed demonstrably with time.

Friedman (1994) suggests that how the student feels on the inside produces disrespectful behavior. Further, Richmond (1990) suggests that when attempting to explain classroom behavior the most important factors are students' internal meanings. Scott (1999) identifies nineteen student self-reported behaviors of respect for the teacher. Scott's (1999) study along with others (Friedman, 1994; Richmond, 1990) report that internalized perceptions correlate to behaviors. All suggest that student reports of self-behaviors will be correlated with student’s orientation toward the teachers. Even though the predictive or associative link between a single cognition and a specific behavior is not strong and has been the subject of extended research efforts for some time (e.g. La Piere, 1934), a valuable measure of student respect for a teacher simply must have such an association. Thus, there is support for the argument that some cognitions are related to behaviors and sufficient literature to pursue the investigation of the validity of the measurement tool based upon the projection of a positive correlation between student respect for a teacher and the student’s self-reported behavior.

On the basis of the preceding review of literature and reasoning that a valid measure of student respect for a teacher would be associated with student reports of self-behavior, the following hypothesis was developed to evaluate the validity of this measure:

H 5: Student respect for a teacher will be positively correlated with student reports of respectful self-behaviors in that teacher’s classroom.

A student’s report of a teacher’s behavior would appear to flow from one of two interactive cyclic perspectives: 1) the teacher behaved in such a manner as to create or impact a student’s respect for that teacher or 2) a students respect for a teacher provides an orientation such that the student may consistently interpret the teachers behavior from a comparable point of view. These are supported by attribution theorists (e.g. Kelly, 1971, 1973; and Kelly & Michela, 1980) as well as the more specific literature associating related cognitions (e.g. teacher credibility) resulting from teacher behavioral changes (e.g. Kearney, Plax, Hays, & Ivey, 1991; Teven & McCroskey, 1996). Teven and McCroskey (1996) suggest that student's favorable rating of teachers positive "caring" is generalized to perceptions of other teacher behavior. The “halo effect” literature is also strongly supportive of this argument associating evaluative
cognitions with perceptions of others' behavior. (Asch, 1946; Nisbett & DeCamp Wilson, 1977; Orman, 1980).

On the basis of the preceding review of literature and reasoning that a valid measure of student respect for a teacher would be associated with student interpretations of the teacher’s behavior toward students, the following hypothesis was developed to evaluate the validity of this measure:

H 6: Student respect for a teacher will be positively correlated with student perceptions of teacher behaviors representing respect for the students.

Method

Instrumentation

The measure of student respect for a teacher was developed within this study. Over thirty bi-polar adjectives representative of student respect for a teacher were initially generated via student group input. Sixteen items (see Table 1) were selected for further testing on the basis of a priori face validity representing the conceptual definition of respect presented earlier. With well-established teacher credibility measurement tools using bi-polar adjectives separated by a seven-step response pattern, the same option was utilized to measure responses to the concept of respect for a teacher.

Hypotheses 1, 2, 3, and 4 representing the three dimensions of teacher credibility (competence, character, & good will) and an evaluation of that teacher were measured using established scales developed by Teven and McCroskey (1996), McCroskey and Young (1981), and Thweatt and McCroskey (1998).

Hypothesis 5 representing respectful student behaviors was operationalized through three measurement tools developed by Yelmsa and Yelsma (1998) and Scott (1999) in the secondary and elementary classroom settings. These were revised to reflect a more appropriate collegiate classroom setting. These scales used a 1-5 response option representing frequency of each behavioral item (never, rarely, sometimes, almost always, always) and are summed across the items to provide a singular score for each participant. The three measures of student behaviors were as follows: 1) Six items representing the frequency of respectful student classroom behaviors (Yelmsa & Yelsma, 1998), 2) Six items representing the frequency of respectful student classroom behaviors (Yelmsa & Yelsma, 1998), 2) Six items representing the frequency of respectful student classroom behaviors (Yelmsa & Yelsma, 1998).

1 The items representing the competence factor of teacher credibility are as follows:
Unintelligent…Intelligent, Trained…Untrained, Inexpert…Expert, Informed…Uniformed, Incompetent…Competent, Bright…Stupid. The items representing the character factor of teacher credibility are as follows: Virtuous…Sinful, Dishonest…Honest, Selfish…Unselfish, Sympathetic…Unsympathetic, Low character…High character, Trustworthy…Untrustworthy. The items representing the caring or good will factor of teacher credibility are as follows: Cares about me…Doesn't care about me, Doesn't have my interest at heart…Has my interest at heart, Not self-centered…Self-centered, Concerned with me…Unconcerned with me, Insensitive…Sensitive, Understanding…No Understanding, Responsive…Unresponsive, Doesn't understand how I feel…Understands how I feel, Understands how I think…Doesn't understand how I think.

2 The items representing student's evaluation of the teacher are as follows: Bad…Good, Valuable…Worthless, Fair…Unfair, Negative…Positive.

3 The items representing student classroom behaviors are as follows: I follow this teacher's directions, I use this teacher's corrections and feedback to improve my work, I use my time wisely while waiting for this teachers' help, I ask this teacher politely for help, explanations, instructions, I avoid cheating in this teacher's class, I offer to help this teacher and other staff, guest, and students in this class. The items representing student behaviors when
respectful behaviors while waiting and listening in the secondary classroom (Yelmsa & Yelsma, 1998), and 3) Five frequency-based items\(^4\) (Scott, 1999) relative to respectful interaction behaviors with a teacher.

Hypothesis 6 representing student perceptions of a teacher’s behaviors toward students was measured by five items drawn from Scott (1999) on the basis of the degree of agreement by students as most representative of teacher respect for students. These items were also slightly restructured to represent the environment found in higher education and measured by the same frequency scale as above.\(^5\)

The reliability of each measurement tool in the current study was assessed using Cronbach’s Alpha with the following results: Evaluation Alpha = .8904, Competence Alpha = .8778, Character Alpha = .8811, Good Will Alpha = .8412, Respectful Behavior Alpha = .6103, Waiting/Listening Alpha = .5793, Student Behavior Report Alpha = .7358, Teacher Respectful Behavior = .7381.

Procedure

Students from a basic speech communication class requiring participation in research activities were asked to volunteer for this project. An option was available for those students desiring not to participate in this particular study. Participants were asked to complete a questionnaire. The questionnaire described the general purpose of the study, contained demographic questions, and then asked the student to focus upon the teacher in the class immediately prior to this class for the remainder of the questionnaire. The remainder of the questionnaire consisted of the measures described above related to student behaviors, teacher credibility, and teacher behavior. 150 students elected to participate in the study and represented the following descriptive characteristics (Males = 60, Females = 89; Freshmen = 56, Sophomores = 51, Juniors = 25, and Seniors = 18; Target Teacher Sex Males = 89, Females = 58; Teacher Target from Student Major = 50, Non-Major = 96.).

Results

The primary concern in responding to the research question through the use of factor analysis was to identify the most parsimonious solution (McCroskey and Young, 1979). There is

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\(^4\) The items representing student behaviors during interactions with the target teacher are as follows: I do not disrupt this teacher when the teacher is presenting class material, I have not been rude to this teacher, I have obeyed this teacher's rules, I do not "talk back" to this teacher, I address this teacher appropriately (Using Mr/Miss/Mrs/Dr and last name).

\(^5\) The items representing student perceptions of the teachers behavior toward students are as follows: This teacher treats students like adults, This teacher does not embarrass students in front of peers, This teacher apologizes when making a mistake, This teacher keeps a student's grades, papers, and conversations private, This teacher does not interrupt students when they are talking.
no a priori theoretical rationale for examining a rotated factor structure nor for specifying an anticipated number of factors to extract, therefore an open principle components analysis was used to seek the simplest factor solution.

The principle components analysis used all 150 responses to the 16 items representing student respect for a teacher. Using the Scree procedure and standard item loading criteria, the procedure produced a one-factor model with all items loading highest on the first factor and all items exceeding a .66 loading. Results of the analysis indicated an eigenvalue of 9.490, 59% of the variance accounted for, and an Alpha reliability coefficient of .9533. Item-total analyses yielded a range of correlations from .62 to .84 suggesting that the items are all highly correlated. Realizing the potential for and the value of a reduced item size measure, examination of the feasibility of reducing the size of the questionnaire was initiated. The six items with the lowest item-total correlation were eliminated and the data submitted to the same analytic procedure. Table 1 contains the item loadings for both the 16-item pool and the reconstructed 10-item pool. The 10-item solution reported a single factor with an eigenvalue of 6.622 with 66% of the total variance accounted for and an Alpha reliability coefficient of .9427. Item-total correlations range from .71 to .83. The internal reliability of the 10-item measure appears to meet or exceed standard requirements. On this basis, the 10-item single factor solution was considered feasible and was utilized in all further testing. Table 2 contains additional descriptive statistics of the measure of student respect for a teacher used in the remainder of this study.

### Table 1: Student Respect for Teacher Factor Loadings Unrotated Principle Component Analysis

<table>
<thead>
<tr>
<th>Items</th>
<th>16 Item Solution</th>
<th>10 Item Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Honorable/Contemptuous</td>
<td>.73</td>
<td></td>
</tr>
<tr>
<td>Not Admirable/Admirable</td>
<td>.78</td>
<td>.79</td>
</tr>
<tr>
<td>Valuable/Valueless</td>
<td>.80</td>
<td>.81</td>
</tr>
<tr>
<td>Not Respectable/Respectable</td>
<td>.80</td>
<td>.81</td>
</tr>
<tr>
<td>Important/Unimportant</td>
<td>.78</td>
<td>.80</td>
</tr>
<tr>
<td>Appreciable/Non-appreciable</td>
<td>.83</td>
<td>.85</td>
</tr>
<tr>
<td>Significant/Insignificant</td>
<td>.84</td>
<td>.86</td>
</tr>
<tr>
<td>Not Praiseworthy/Praiseworthy</td>
<td>.87</td>
<td>.87</td>
</tr>
<tr>
<td>Qualified/Not Qualified</td>
<td>.73</td>
<td></td>
</tr>
<tr>
<td>Not Esteem-able/Esteem-able</td>
<td>.66</td>
<td></td>
</tr>
<tr>
<td>Useful/Useless</td>
<td>.69</td>
<td></td>
</tr>
<tr>
<td>Deconstructive/Constructive</td>
<td>.75</td>
<td>.76</td>
</tr>
<tr>
<td>Beneficial/Worthless</td>
<td>.78</td>
<td>.79</td>
</tr>
<tr>
<td>Advantageous/Non-advantageous</td>
<td>.79</td>
<td>.81</td>
</tr>
<tr>
<td>Productive/Not Productive</td>
<td>.73</td>
<td></td>
</tr>
<tr>
<td>Not Credible/Credible</td>
<td>.75</td>
<td></td>
</tr>
</tbody>
</table>
Table 2: Student Respect for Teacher Descriptive Statistics

<table>
<thead>
<tr>
<th>M</th>
<th>Mdn</th>
<th>Mode</th>
<th>SD</th>
<th>skewness</th>
<th>kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>56.0</td>
<td>58.0</td>
<td>55.0</td>
<td>9.929</td>
<td>-.796</td>
<td>-.056</td>
</tr>
</tbody>
</table>

The convergent validity of this single factor solution was examined in response to the hypotheses generated earlier. First, Hypotheses 1, 2, and 3 were examined through correlations of SR-T with student perceptions of teacher credibility in the form of competence (r = .73, d.f. = 290, p < .000), character (r = .72, d.f. = 288, p < .000), and caring or good will (r = .75, d.f. = 284, p < .000). The substantiation of these hypotheses provides further evidence of the strength of the SR-T predictive validity. Next, Hypothesis 4 was examined through the correlation of SR-T with their evaluation of that teacher (r = .87, d.f. = 288, p < .000).

Hypothesis 5 was examined by correlating SR-T with three reports of student behaviors: 1) student’s report of self-behaviors representing general classroom respectful behaviors (r = .46, d.f. = 284, p < .000), 2) student reports of self-behaviors representing waiting/listening behaviors associated with that teacher (r = .21, d.f. = 280, p < .000), and 3) student reports reflecting self-interaction behaviors with the teacher (r = .05, d.f. = 288, p = .29). On this basis, SR-T validity was evaluated as receiving a low to moderate level of support with two of three tests of the fundamental hypothesis confirmatory.

Finally, Hypothesis 6 was tested through the correlation of SR-T with student reports of the target teacher’s behaviors representing respect for the students (r = .46, d.f. = 282), p < .000). The SR-T validity received further confirmation from the substantiation of this hypothesis.

Five of the six validity hypotheses were fully supported. The fifth hypothesis was supported in two of three different operationalizations. On this basis, the convergent validity of the SR-T was considered to be confirmed.

**Discussion**

The findings of this study indicate that cognitions representing student respect for a teacher are measurable within the context of the college educational system. The data demonstrates adequate internal reliability and establishes sufficient validity to proceed with the use of this tool.

SR-T was examined relative to associations to four other cognitions, specifically student reports of three factors of teacher credibility and the student evaluation of the teacher. There was a strong positive relationship between the students' perceptions of respect for a teacher with regard to reports of the teachers' competence, caring, and character and the student's evaluation of the teacher. As expected, these correlations were fairly high. The conceptual relationship between SR-T and credibility and evaluation is very strong and the data provide credence to these associations. Future research should explore further this association and identify distinguishing aspects.

Student reports of general classroom behaviors and of behaviors during periods of waiting and listening were moderately and significantly associated with SR-T. However, student reports of interaction-oriented behaviors with that teacher were not correlated with SR-T. The latter may be an instance where our cultural guidelines for public interactions with teachers take precedence in the mature college student such that low levels of respect are not influential upon
interaction behavior decisions. This, of course, may not be the case with elementary students or even secondary students who may not yet have that cultural guideline as well established.

SR-T was correlated with student reports of the target teacher’s behavior that was considered as representative of the teacher’s respect for the student. This clearly indicates the strong communicative value maintained within the communication style and specific behaviors of the teacher when interacting with students. If a teacher is perceived by students to behave disrespectfully to students, students respect for that teacher will be reflective of that state. Future research should explore this association from a cause-effect foundation. With the classroom behaviors of elementary and secondary teachers better prepared through their educational certification process than are typical college teachers, we may find the proportion of SR-T variance accounted for by disrespectful teacher behaviors in the college environment to exceed that found in lower educational levels. Should research confirm this speculation, higher education administrators may wish to address this concern during the various teacher development programs available for the college instructor.

Now that a reliable and valid measurement tool is available, there should be expanded investigation of the sources that may have impacted and/or generated different levels of respect for a teacher (e.g., parents, peers, personal experience, impression-making) at all educational levels. And future research should explore student respect for teachers as a group, again at all levels of education. Also at the collegiate level there should be more specific investigation of learning outcomes as a function of the student’s respect for teachers. And finally, researchers should investigate the potential for positive impact options available to teachers and administrators.
References


