Handshake: Its Relation to First Impressions and Measured Personality Traits

This study examined the relation of the handshake both to perceived personality characteristics in a first-impression situation and to actual measured personality traits. One hundred eight male and female college students completed the Eight State Questionnaire (8SQ), which measures 8 personality characteristics. Additionally, the students rated 2 other participants on 3 hand-shaking measures and also provided their impressions of these 2 participants on the same 8 personality traits measured by the 8SQ. For men, perceived arousal was positively correlated with a firm, warm, and dry handshake. For women, a firm, warm, and dry handshake was positively related to perceived arousal and extroversion and negatively related to perceived anxiety, depression, fatigue, guilt, and regression. Results are discussed in terms of the particular importance of the handshake to women. It is concluded that when a woman extends her hand to be shaken, it is important that it be firm, warm, and dry if she wants to make a positive first impression on others.

Interpersonal communication is a basic component of human interaction. It is difficult to overemphasize the importance of the communication process. The quality of our life experience, whether we are happy or frustrated, is to a large extent dependent on our ability to communicate effectively with others. Because of the importance of communication, we have developed an extremely intricate verbal language. Despite the intricacy of our verbal language, some experts have estimated that at least 65% of the messages we send one another occur at the nonverbal level (Burgoon, Buller, & Woodall, 1989). Weiten and Lloyd (2000) defined nonverbal communication as “the transmission of meaning from one person to another through means or symbols other than words” (p. 189). Major means of nonverbal communication include facial expression, head nodding, body posture, touch, and eye contact, each of which may convey thoughts, emotions, and personality.

The handshake has traditionally been a common means of greeting others. This form of greeting behavior was developed from a handclasp dating back to ancient Rome (Knapp, 1980). The handshake is considered by many to be a form of nonverbal communication that conveys a great deal about a person. Amy Vanderbilt (1957), in her book *Amy Vanderbilt’s Complete Book of Etiquette*, states that “A handshake is as much a part of personality as the way we walk, and although we may modify and improve a poor handshake if someone calls our attention to it, it will still usually be just like us, assured or timid, warm or cool” (p. 185).

Although concern with nonverbal communication is prevalent in psychological research, little of it has been devoted to the handshake. Astrom and colleagues have conducted a few studies investigating the relation between greeting behavior, including the handshake, and personality traits (Astrom, 1994; Astrom & Thorell, 1996; Astrom, Thorell, Holmlund, & d’Elia, 1993).

Astrom et al. (1993) looked at the relation between handshake variables and personality traits in psychiatric patients. The experimenters trained two psychologists to perform a standardized handshake with each participant. The psychologists rated the participants on four handshake dimensions, each measured on a 5-point scale: (a) consistency of handshake (limp and loose to rigid and muscular), (b) temperature of hand (cold to warm), (c) dryness of hand (wet to dry), and (d) strength of grip (no pressure to very strong pressure). Colder handshakes were correlated with social...
Handshake: Its Relation to First Impressions

Shipp and Freeman

Introversion in both men and women. Hand dryness was correlated with psychological masculinity in women. Moist hands were correlated with depression in men.

Astrom (1994) conducted research that examined possible relations between aspects of introductory greeting behaviors, including the handshake, and personality traits in a nonclinical population. Using the Cecarec-Marke Personality Schedule (as cited in Astrom, 1994), Astrom measured 12 psychogenic needs derived from the personality theory of Henry Murray. Trained raters assessed the handshake dimensions (consistency, dryness, temperature, and strength). In addition, each rater assessed the handshake dimensions with regard to how a “most pleasant handshake” and a “most unpleasant handshake” are perceived. Limp, cold, wet, and weak handshakes were viewed as the most unpleasant. Women, in comparison to men, had significantly less consistency and strength in their handshakes.

Astrom (1994) analyzed the relation between handshake and personality traits separately for men and women. For men, perceived dryness of handshake correlated positively with sociability, and perceived strength related positively to aggressive nonconformance and negatively to sociability. In women, high temperature and strength of handshake related positively to rational dominance. For both men and women, the strength of handshake related positively to the personality traits of aggression, dominance, and exhibition (collectively known as extroversion).

Astrom and Thorell (1996) studied three professional groups who use the handshake (therapists, clergymen, and car salesmen) to determine whether they were able to detect any connection between greeting behaviors and personality characteristics. They interviewed participants about 22 types of greeting behavior especially related to shaking hands and asked them to associate the occurrence of each behavior with 1 or 2 of the 12 traits measured by the Cecarec-Marke Personality Schedule. Participants agreed about the relation of greeting behaviors to personality characteristics, particularly the traits of extraversion and introversion. A weak handshake related to the trait of introversion and a strong handshake to extraversion. More than three fourths of the greeting behaviors related to at least one of the personality traits.

Chaplin, Phillips, Brown, Clanton, and Stein (2000) investigated the idea that handshakes are reflected in personality and influence first impressions of others. Participants were college undergraduates. Trained raters assessed the participants’ handshakes on eight characteristics: (a) completeness of grip, (b) temperature, (c) dryness, (d) strength, (e) duration, (f) vigor, (g) texture, and (h) eye contact. The handshake raters also provided their impression of the students by rating each participant on 5-point scales representing each of eight personality characteristics: (a) openness to experience, (b) conscientiousness, (c) extroversion, (d) agreeableness, (e) neuroticism, (f) shyness, (g) emotional expressiveness, and (h) general affect. A firm handshake related positively to measured extroversion and emotional expressiveness and related negatively to neuroticism and shyness. In women, a firm handshake related positively to measured openness to experience. First impressions were more positive with a firm handshake. Because of the pattern of relations between openness, sex, handshake, and first impressions, Chaplin et al. suggested that a firm handshake might be an especially effective means of impression management for women.

Although these studies may provide some insight into the relation of the handshake and impression formation, much remains to be discovered. The aim of the present study was to investigate the relation of handshake to both perceived personality characteristics in a first-impression situation and actual measured personality traits. Consistent with previous research, we expected that a firm, warm, and dry handshake would be related to a positive first impression and to higher scores on traits such as anxiety, depression, and guilt, whereas a limp, cold, and wet handshake would be related to a negative first impression and to lower scores on the same traits.

Method

Participants

One hundred eight undergraduate introductory psychology students participated in the study in partial fulfillment of a course requirement. Five participants’ questionnaires were incomplete, and we omitted them from the analysis of the data. Of the remaining questionnaires, 64 were completed by women and 39 by men aged 18 to 22 years. The majority of participants were Caucasian.

Measures

Personality ratings. Each participant completed the Eight State Questionnaire (8SQ; Institute for Personality and Ability Testing, 1975). The 8SQ consists of 96 questions about moods and feelings that most people experience. Each question is followed by four possible answers: (a) very true, (b) fairly true, (c) fairly false, and (d) very false. The respondent chooses the one response that best reflects the way he or she feels at the moment. The 8SQ assesses eight personality traits: (a) anxiety, (b) depression, (c) stress, (d) extraversion, (e) fatigue, (f) regression, (g) arousal, and (h) guilt. Scores on each trait can range from a low of 0 to a high of 36.
Handshake ratings. Each participant rated two other participants on three handshake characteristics, each on a 5-point scale: (a) strength (from 1 = weak to 5 = firm), (b) temperature (from 1 = cold to 5 = warm), and (c) moisture (from 1 = wet to 5 = dry). We calculated a handshake index by summing the scores on the three handshake factors of strength, temperature, and dryness. Scores could range from 3 to 15, with low scores indicating the handshake characteristics of being weak, cold, and wet and high scores indicating being firm, warm, and dry. Each participant also provided his or her impression of the two other participants on the same eight personality traits measured by the 8SQ. They rated each trait on a 9-point scale from 1 = not at all to 9 = very.

Procedure

Participants met in a large classroom in five groups, with the number of students in each group ranging from 19 to 24. Upon arrival, they completed the 8SQ and received a numerical ID tag to wear on their chest. The experimenter placed the participants into groups of three, each composed of students who reported that they did not previously know each other. One at a time, the experimenter took each group to another room where she explained that when people meet for the first time they typically shake hands. She asked the participants to introduce themselves and to shake hands. She told them to pay close attention to the handshakes of the other participants as well as to their ID numbers because they would be filling out a questionnaire indicating their impressions of each other. She then separated them and gave each a questionnaire containing the handshake ratings and personality ratings. Following completion of the questionnaire, the experimenter took approximately 10 participants aside and asked whether they had altered their handshake because they knew others were paying close attention to it. Only one indicated doing so. The experimenter asked approximately 10 other participants whether they had difficulty completing the ratings of the eight personality characteristics. Nobody reported difficulty.

Results

Measured Personality Characteristics

We computed a multivariate analysis of covariance (MANCOVA) with sex of the rater (male or female) and sex of the target (male or female) serving as the independent variables. The handshake index was the covariate, and the target's scores on the eight scales of the 8SQ (anxiety, stress, depression, regression, fatigue, guilt, extroversion, arousal) were the dependent variables. The MANCOVA yielded no significant effects either for the independent variables or the covariate.

Perceived Personality Characteristics

We computed a MANCOVA with sex of rater (male or female) and sex of target (male or female) serving as the independent variables. The handshake index was the covariate, and the dependent variables were the raters' responses to the eight scales on the 8SQ. The covariate was significantly related to perceived personality characteristics, $F(8, 194) = 3.38, p = .001$. No significant main effects were observed. Table 1 shows mean scores for measured and perceived personality characteristics.

Because of the significant covariate effect, we computed correlations to assess the relation of the handshake index to scores on the eight scales of the 8SQ in male and female targets. We computed additional correlations to assess the relation when men rated men, women rated men, men rated women, and women rated women.

For male targets, only arousal was significantly, and positively, related to the handshake index. For female targets, the handshake index was significantly, and positively, related to arousal and extroversion; it was significantly, and negatively, related to anxiety, depression, fatigue, guilt, and regression (see Table 2).

Table 3 shows that when men rated men, the handshake index was positively related to perceived arousal. When women rated men, no significant correlations were observed. When men rated women, the handshake index was negatively related to perceived anxiety and depression. When women rated women, the

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Measured</th>
<th>Perceived</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anxiety</td>
<td>14.85</td>
<td>3.67</td>
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<tr>
<td>Stress</td>
<td>16.97</td>
<td>3.52</td>
</tr>
<tr>
<td>Depression</td>
<td>12.85</td>
<td>2.86</td>
</tr>
<tr>
<td>Regression</td>
<td>14.80</td>
<td>3.06</td>
</tr>
<tr>
<td>Fatigue</td>
<td>18.56</td>
<td>3.69</td>
</tr>
<tr>
<td>Guilt</td>
<td>16.04</td>
<td>2.89</td>
</tr>
<tr>
<td>Extroversion</td>
<td>21.16</td>
<td>5.21</td>
</tr>
<tr>
<td>Arousal</td>
<td>17.00</td>
<td>5.61</td>
</tr>
</tbody>
</table>
TABLE 2
Correlations Between Handshake Index and Eight Perceived Personality Characteristics for Men and Women

<table>
<thead>
<tr>
<th>Personality characteristics</th>
<th>Handshake index</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Men</td>
</tr>
<tr>
<td>Arousal</td>
<td>.259*</td>
</tr>
<tr>
<td>Anxiety</td>
<td>-.041</td>
</tr>
<tr>
<td>Depression</td>
<td>.022</td>
</tr>
<tr>
<td>Extroversion</td>
<td>.173</td>
</tr>
<tr>
<td>Fatigue</td>
<td>.054</td>
</tr>
<tr>
<td>Guilt</td>
<td>-.002</td>
</tr>
<tr>
<td>Regression</td>
<td>.097</td>
</tr>
<tr>
<td>Stress</td>
<td>-.129</td>
</tr>
</tbody>
</table>

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

Handshake index was positively related to perceived arousal and extroversion, and negatively related to perceived depression, fatigue, and guilt.

**Discussion**

Inconsistent with the research of Astrom and colleagues (Astrom, 1994; Astrom & Thorell, 1996; Astrom et al., 1993), handshake was not related to measured personality characteristics. Consistent with previous research (e.g., Chaplin et al., 2000), handshake was related to perceived personality characteristics (i.e., first impression). As in Chaplin et al., a firm, warm, dry handshake was related to formation of a positive impression. Chaplin et al. recommended that women use a firm handshake as a positive form of self-promotion.

According to Amy Vanderbilt (1957), women are not supposed to extend their hand to be shaken, unless they are meeting someone for the first time, unlike men, who shake hands as a common greeting. One possible reason for the stronger relation between shaking hands and impression formation in women may be that because historically it has been unusual for women to engage in shaking hands, people may pay more attention to it in women. The results of the present study also indicate that the relation occurs more frequently when women are judging other women.

Several limitations are apparent in the present study. The participants were predominantly women (64 women to 39 men); to more accurately compare the two sexes, it would be better to have a closer ratio. Owing to space limitations, the participants completed the initial survey in a large classroom with the other participants and were separated into smaller groups and taken to another room one at a time. Students who remained in the classroom for a longer period of time had greater opportunity to form impressions based on visual cues. It would have been preferable to separate the participants at the beginning, but space limitations prevented this. Future research should place people in a more realistic situation to study first impressions based on shaking hands, perhaps in a job interview setting. This setting seems particularly relevant because, historically, women have not had the same employment opportunities as men. Some have argued that to overcome this difference in job access, women need to eliminate the impression that they are less qualified (Glick, Zion, & Nelson, 1988). The handshake is a common ritual in a job interview, and the results of this study and that of Chaplin et al. suggest that this ritual may allow women who exhibit a firm,
warm, dry handshake to create a more positive impression of themselves, especially when being interviewed by a woman.

References