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| <b>PERSONALITY AND INDIVIDUAL DIFFERENCES</b>   |   |
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# Personality and Individual Differences

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## Communication competence mediates the link between shyness and relational quality

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### ABSTRACT

Human relationships are vital for well-being, however shy individuals report lower relational quality than the non-shy. In an effort to explore *how* shyness affects people's interpersonal relationships, this study focused on communication competence (as perceived by self and other) as the process by which shyness influences relational quality. Undergraduate students recruited a same-sex platonic friend to participate in this study along with them; participants ( $N = 310$ ; dyads = 155) were directed to an online questionnaire to complete a series of measures about themselves, their friend, and their relationship. Results showed that self-perceived and other-perceived communication competence mediate the relationship between shyness and relational quality, such that shy people's difficulty maintaining quality personal relationships is partially a function of their lower self- and other-perceived communication competence.

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### 1. Introduction

Shyness thwarts interpersonal goals such as initiating friendships (Asendorpf, 2000), by inhibiting communication when interacting with others. Such inhibitions include speaking less and behaving awkwardly during interactions, and these are associated with perceptions of low communication competence (Cheek & Buss, 1981; Pilkonis, 1977). Shyness is associated with communication difficulties during relationship formation because of negative relationship expectations and fear of negative evaluations (Jackson, Towson, & Narduzzi, 1997; Miller, 1995). However, shy people develop and maintain life-long relationships with family, friends, co-workers, lovers, and spouses, albeit at times with lower levels of relationship quality (Nelson et al., 2008). Because relationships are vital for people's well-being (Spitzburg & Cupach, 2003), exploring how shyness affects people's long-term relationships is essential. The current paper focuses on whether shyness' effects on communication competence constitute one process by which shyness influences long-term relationship quality.

Our study focuses on platonic friendships. Friendships are important in helping people cope with stressors, both during childhood (Miller & Coll, 2007) and adulthood (Burlison & MacGeorge, 2002; Kisch, Leino, & Silverman, 2005). However, friendships tend to be less studied than romantic relationships. Communication competence has repeatedly been shown to have consequences

for the quality of relationships (Lawrence et al., 2008); here too friendships have received little attention, even though the specific relational manifestations of competence probably vary by relationship type (Spitzburg & Cupach, 2003).

#### 1.1. Shyness and long-term relational quality

The predisposition toward shyness starts at conception and affects personal relationships through adolescence (Miller & Coll, 2007) and adulthood (Baker & McNulty, 2010; Nelson et al., 2008). Shyness is associated with a number of cognitive, affective, and behavioral characteristics *throughout* people's lives. Shy people are more depressed (Nelson et al., 2008), lonely (Findlay, Coplan, & Bowker, 2009), have lower perceptions of self-worth, social acceptance, and physical appearance (Nelson et al., 2008), and feel discomfort or inhibition during interpersonal interactions (Henderson & Zimbardo, 1998). Shyness is associated with social anxiety (Leary & Kowalski, 1995), and socially anxious people have unrealistic negative self-evaluations of their social skills (Segrin & Kinney, 1995).

Shy people display differences in verbal and nonverbal communication compared to people who are not shy. Shy people have a harder time initiating and structuring conversations (Pilkonis, 1977), speak less, and take a longer time to respond during conversations (Leary & Kowalski, 1995). Shy people display higher levels of fidgeting and poor reciprocity of smiling behavior (Heerey & Kring, 2007) and are viewed by others as less friendly, less assertive, and less relaxed (Pilkonis, 1977), and are less verbally competent than their peers (Evans, 1993). People's display of

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appropriate communication behaviors is referred to *communication competence*—the judgment one has about one's own or another's "ability to manage interpersonal relationships in communication settings" (Rubin & Martin, 1994, p. 33). Not only do others perceive shy people to be boring or uninteresting (Alm & Frodi, 2006), shy people themselves report having difficulty articulating their thoughts and feelings, not having appropriate interaction management skills, and believing that they are less competent than non-shy people (Prisbell, 1991). Therefore, it appears that shy people are somewhat less competent in social interactions, and that they are aware of this fact. Because of this low competence, shy people may have difficulties managing their relationships because they are unable to talk effectively, fail to act in accordance to their partners' expectations, or act in ways that are destructive for the relationship. Most broadly, then, we predict that communication competence serves as a mechanism (mediator) by which shyness leads to low relational quality. Below we explicate three specific hypotheses, each of which specifies this mediator relationship in terms of both parties to a friendship.

Interdependence theory (Thibaut & Kelly, 1959) focuses on the rewards and costs incurred within relationships and predicts greater relationship satisfaction when costs are minimized. Minimizing costs involves working through relationship problems, which requires having the communication skills to discuss problems and seek solutions. Competent communicators should be better at this, and hence should reap relational rewards. As already discussed, shy people are less likely to be highly competent communicators. Therefore, we hypothesize that for a given individual *communication competence mediates the relationship between shyness and relationship quality* (H1).

Partner's communication competence is also associated with satisfaction in relationships – for instance, competent partners provide relational rewards by offering effective and appropriate communication (e.g., social support: Flora & Segrin, 1999; Meeks, Hendrick, & Hendrick, 1998). If partners of shy people perceive them as having poor skills, they will be likely to perceive the relationship as providing insufficient rewards and therefore experience low relationship quality. Thus, we predict that *perceptions of a relational partner's communication competence will mediate the relationship between partner's shyness and self's relationship quality* (H2).

Lastly, one component of rewards in a relationship is the idea that the self is viewed positively and valued by the partner. When people become aware that their relational partners view them negatively, the relationship loses one dimension of quality. For shy people, who are already aware of their limited communication competence, being negatively evaluated by their partner in terms of communication skills will be a source of relational distress. As such, we predict that *partners' evaluations of communication competence will mediate the relationship between self's shyness and self's relational quality* (H3). Clearly such a hypothesis is premised on the idea that perceptions of communication competence are somehow visible and communicated to relational partners. We suspect that this occurs through multiple means in relationships, including explicit metacommunicative discussion of such issues.

## 2. Method

### 2.1. Participants

One member of a friend dyad was recruited from undergraduate communication courses at a large U.S. university, and received extra credit in exchange for completing an online questionnaire. In order to increase diversity in shyness, this person was randomly assigned to recruit a same-sex platonic friend who was either shy or not-shy and who they had known for at least three months.

The students provided the e-mail address of the friend, who then received a link to the questionnaire. Henceforth, the undergraduate is referred to as the "student", and their recruited friend is referred to as the "friend" ( $N = 310$ , dyads = 155).

Most participants were young adults (friend age:  $M = 22$  years old,  $SD = 3.67$ ; student age:  $M = 21$ ,  $SD = 2.14$ ), female (friends and students: 77% female, 23% male), and White (friends: 83% White, 5% Black, 7% Latino, 5% Other; students: 83% White, 4% Black, 8% Latino, 6% Other). Participants reported their relationship length in months; both partners' responses were averaged to compute the relationship length for the dyad (range: 3.5 months–15.8 years;  $M = 47.87$  months,  $SD = 35.55$ ; friend–student  $r = .42$ ,  $p < .001$ ).

## 2.2. Measures

### 2.2.1. Shyness

The Revised Cheek and Buss Shyness Scale (Crozier, 2005) measured affective (e.g., "I feel nervous when speaking to someone in authority"), behavioral (e.g., "I have trouble looking someone right in the eye"), and cognitive (e.g., "When in a group of people, I have trouble thinking of the right things to talk about") characteristics of shyness on a five-point Likert scale (1 = *not true of me at all* to 5 = *extremely true of me*); items were averaged, with high scores denoting high shyness (Friend:  $M = 2.29$ ,  $SD = 0.71$ ,  $\alpha = .87$ ; Student:  $M = 2.17$ ,  $SD = 0.55$ ,  $\alpha = .80$ ). Friends were more shy when students were asked to recruit a shy person ( $M = 2.49$ ,  $SD = 0.74$ ) than a not-shy person ( $M = 2.10$ ,  $SD = 0.63$ ;  $t(153) = 3.54$ ,  $p < .05$ ,  $d = .57$ ), indicating that the friend recruitment manipulation was successful.

### 2.2.2. Communication competence

This was measured with a shortened version of Wiemann's, (1977) Communication Competence Scale. Friends and students filled out this measure twice; once with themselves as the target (self-perceived communication competence; e.g., "I am an effective conversationalist") and once with the other person as the target (other-perceived communication competence; e.g., "My friend is an effective conversationalist"). This seven-item scale was measured on five-point Likert scale (1 = *strongly agree* to 5 = *strongly disagree*); items were averaged, with high scores denoting high communication competence (Self-perceived communication competence – Friend:  $M = 4.20$ ,  $SD = 0.62$ ,  $\alpha = .80$ ; Student:  $M = 4.14$ ,  $SD = 0.52$ ,  $\alpha = .73$ ; Other-perceived communication competence – Friend:  $M = 4.30$ ,  $SD = 0.58$ ,  $\alpha = .81$ ; Student:  $M = 4.00$ ,  $SD = 0.72$ ,  $\alpha = .82$ ).

### 2.2.3. Relationship quality

The investment model (Rusbult, 1980), based on interdependence theory, distinguishes between relational commitment (one's intent to stay in or leave the relationship) and satisfaction (the degree to which positive affect is associated with the relationship). Given the fit of these measures with our theoretical framework, they constitute the means by which we assess relational quality in this study. The Investment Model Scale (Rusbult, Martz, & Agnew, 1998) measured satisfaction (e.g., "I feel satisfied with our friendship") and commitment (e.g., "I am committed to maintaining my friendship with my friend"). Items were rated on a five-point Likert scale (1 = *do not agree at all* to 5 = *completely agree*), and averaged, with high scores denoting higher levels of each construct (Satisfaction – Friend:  $M = 4.38$ ,  $SD = 0.61$ ,  $\alpha = .86$ ; Student:  $M = 4.18$ ,  $SD = 0.74$ ,  $\alpha = .90$ ; Commitment – Friend:  $M = 4.48$ ,  $SD = 0.60$ ,  $\alpha = .78$ ; Student:  $M = 4.27$ ,  $SD = 0.68$ ,  $\alpha = .82$ ).

**Table 1**  
Individual correlations of friends' ratings of self, partner, and relationship.

|                            | 1      | 2      | 3      | 4     | 5     |
|----------------------------|--------|--------|--------|-------|-------|
| 1. Shyness                 | –      | –.40** | –.28** | –.09  | –.03  |
| 2. Self-perceptions of CC  | –.45** | –      | .20**  | .18*  | .14   |
| 3. Other-perceptions of CC | –.16   | .28**  | –      | .33** | .35** |
| 4. Satisfaction            | –.24** | .24**  | .44**  | –     | .67** |
| 5. Commitment              | –.08   | .15    | .34**  | .64** | –     |

Note: CC = communication competence; correlations of *Friend* are below the diagonal and correlations above the diagonal are in reference to *Student*.

\*  $p < .05$ .  
\*\*  $p < .01$ .

**Table 2**  
Intradyadic correlations of friend by student ratings of self, partner, and relationship.

| Friend                     | Student |      |        |       |       |
|----------------------------|---------|------|--------|-------|-------|
|                            | 1       | 2    | 3      | 4     | 5     |
| 1. Shyness                 | –.01    | –.03 | –.33** | –.15  | –.19* |
| 2. Self-perceptions of CC  | –.04    | .11  | .36**  | .15   | .27** |
| 3. Other-perceptions of CC | –.16*   | .13  | .17*   | .10   | .20** |
| 4. Satisfaction            | –.20*   | .16  | .15    | .35** | .32** |
| 5. Commitment              | –.11    | .07  | .18*   | .25** | .34** |

Note: CC = communication competence; there are no differences in the correlations above and below the diagonal – they all indicate *Friend* by *Student* ratings of self, partner, and relationship.

\*  $p < .05$ .  
\*\*  $p < .01$ .

### 3. Results

The intraindividual correlations for all study variables are presented in Table 1 and intradyadic correlations appear in Table 2. Independent sample *t*-tests revealed that there were no gender differences in shyness for friends (females:  $M = 2.12$ ,  $SE = .05$ , males:  $M = 2.33$ ,  $SE = .58$ ,  $t(153) = 1.96$ , *ns*) or students (females:  $M = 2.27$ ,  $SE = .06$ , males:  $M = 2.35$ ,  $SE = .12$ ,  $t(153) = -.60$ , *ns*). Similarly, there were no gender differences in self-perceptions of communication competence for friends (females:  $M = 4.25$ ;  $SE = .06$ , males:  $M = 4.05$ ,  $SE = .10$ ,  $t(153) = -1.69$ , *ns*) or students (females:  $M = 4.16$ ,  $SE = .05$ , males:  $M = 4.12$ ,  $SE = .08$ ,  $t(153) = -1.69$ , *ns*). Among the

**Table 3**  
The mediating role of communication competence on the relationship between shyness and relationship quality dependent variables.

| Dependent variable (DV)   | Shyness → competence | Competence → DV | Shyness → DV (Total) | Shyness → DV (Direct) | 95% CI       |
|---|----------------------|-----------------|----------------------|-----------------------|--------------|
| <i>H1: Friend shyness → Friend perception of own competence → Friend DV</i>       |                      |                 |                      |                       |              |
| Satisfaction  | –.40*                | .16             | –.21*                | –.14                  | –.15, .003   |
| Commitment  | –.40*                | .13             | –.08                 | –.03                  | –.14, .02    |
| <i>H1: Student shyness → Student perception of own competence → Student DV</i>    |                      |                 |                      |                       |              |
| Satisfaction  | –.37*                | .23             | –.13                 | –.04                  | –.20, .007*  |
| Commitment  | –.37*                | .19             | –.05                 | –.02                  | –.17, –.001* |
| <i>H2: Student shyness → Friend perception of student competence → Friend DV</i>  |                      |                 |                      |                       |              |
| Satisfaction  | –.16                 | .44*            | –.22*                | –.14                  | –.17, –.005* |
| Commitment  | –.16*                | .37*            | –.13                 | –.07                  | –.14, –.002* |
| <i>H2: Friend shyness → Student perception of friend competence → Student DV</i>  |                      |                 |                      |                       |              |
| Satisfaction  | –.34*                | .31*            | –.17*                | –.06                  | –.19, –.04*  |
| Commitment  | –.34*                | .30*            | –.19*                | –.09                  | –.18, –.05*  |
| <i>H3: Friend shyness → Student perception of friend competence → Friend DV</i>   |                      |                 |                      |                       |              |
| Satisfaction  | –.33*                | .07             | –.21*                | –.18*                 | –.07, .02    |
| Commitment  | –.33*                | .13             | –.08                 | –.04                  | –.11, .00    |
| <i>H3: Student shyness → Friend perception of student competence → Student DV</i> |                      |                 |                      |                       |              |
| Satisfaction  | –.16                 | .13             | –.13                 | –.11                  | –.09, .007   |
| Commitment  | –.16                 | .25*            | –.05                 | –.01                  | –.12, –.003* |

Note: Table entries are path coefficients derived from Hayes (2009) INDIRECT SPSS macro. Statistically significant confidence intervals (CI) indicate that the indirect effect differs significantly from zero, and hence that there is statistically significant mediation. Relationship length was used as a covariate in each analysis.

\*  $p < .05$ .

friends, there was no gender difference in other-perceptions of communication competence (females:  $M = 4.10$ ,  $SE = .06$ , males:  $M = 3.70$ ,  $SE = .11$ ,  $t(153) = -3.06$ , *ns*); however, among the students, women ( $M = 4.08$ ,  $SE = .06$ ) had significantly higher other-perceptions than men ( $M = 3.70$ ,  $SE = .11$ ),  $t(153) = -3.06$ ,  $p < .05$ . Given the preponderance of nonsignificant sex differences, gender was dropped from subsequent analyses.

To test our hypotheses that communication competence mediates the relationship between shyness and relational quality, we used bootstrapped tests of indirect effects (Hayes, 2009). The models used 5000 bootstrapped resamples that generated 95% bias corrected and adjusted confidence intervals (Bca CI); CI's not including zero demonstrate a statistically significant indirect effect. Each hypothesis was tested for friends and students (see Table 3).

H1 predicted that self-perceived communication competence mediates the relationship between one's shyness and relationship quality. H1 was partially supported, as communication competence was *not* a significant mediator for friends' satisfaction or commitment but was for students (Table 3: top panel). H2 predicted that other-perceived communication competence mediates the relationship between the other's shyness and one's own relationship quality. H2 was supported for both friends' and students' satisfaction and commitment (Table 3: middle panel). H3 predicted that others' perception of communication competence would mediate the relationship between self-perceived shyness and self-perceived relationship quality. This effect held only for students' commitment (Table 3: bottom panel).

### 4. Discussion

We predicted that self-perceived and other-perceived communication competence are mechanisms that explain why shy people and their relational partners have lower levels of relationship quality than the non-shy and their partners. Self- and other-perceived communication competence were shown to be important mechanisms mediating the relationship between shyness and relational quality, such that people report lower levels of satisfaction and commitment when perceptions of communication competence are low. Overall, through the mediating role of perceived communication competence, the findings support the idea that shy people have lower quality in long-term personal relationships.



H1 and H3 were concerned with the mediating role of perceived communication competence in the effects of shyness on one's own relational quality. In contrast, H2 examined the effects of perceived communication competence on *partners'* relational quality. Our results suggest that our predictions are most strongly supported for *partners*, such that shyness influences *partners'* satisfaction and commitment through competence more than it influences one's own satisfaction and commitment through competence. This supports previous research suggesting that communication skills are related to *partners'* relational outcomes (Flora & Segrin, 1999). Considering competence as the external manifestation of shyness, it is sensible that the partner effects should be stronger than the self-effects. For shy people, aware as they are of their own shyness, the impact of shyness on their relational outcomes may be relatively direct. On the other hand, a partner will be affected by the behavioral and relational manifestations of shyness (communication competence, perhaps among others), and hence it serves as a more logical mediator in that context. Nonetheless, the fact that competence mediates in at least some instances for one's self indicates that such indirect effects do persist, and that shy people's relational success is partially affected by the extent to which they can control the behavioral manifestations of their trait.

Limitations of our study point to directions for future research. Future studies should explore longevity outcomes for these relationships by employing longitudinal designs. Exploring such outcomes could elucidate shy individuals' attributions for relationship decline. Future research should also consider ways of targeting shy respondents more directly, given that our sample did not include a large number of people who are shy by past researchers' standards (Cheek & Buss, 1981). We also only looked at same-sex platonic friendships among college students. Further examination of other relationships and age groups would allow us to investigate, for instance, whether shyness affects relationship quality in later life friendships, where individuals are more focused on creating relationships that are emotionally meaningful (Carstensen, Isaacowitz, & Charles, 1999).

People's (in)ability to communicate effectively influences their relationships. The current study shows that trait shyness influences communication competence, which in turn affects relational quality, hence providing improved understanding of the mechanisms through which shyness influences interpersonal relationships. Moreover, it shows that the effects of shyness extend to both the shy person, and to their partner's evaluations. Our findings concerning communication competence suggest that communication training might be valuable for shy people to buffer the link between shyness and relational outcomes. We also extended previous shyness research into the domain of longer term relationships, demonstrating that shyness' negative effects extend beyond initial interactions.

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