The role of social support and self-esteem in the relationship between shyness and loneliness

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ABSTRACT

This study aimed at examining the role of social support and self-esteem in the relationship between shyness and loneliness. The sample consisted of 399 college students, ranging in age from 18 to 30. Cheek and Buss shyness scale, multi-dimensional scale of perceived social support, Rosenberg self-esteem scale and emotional and social loneliness scale were used for data collection. Structural equation modeling showed partial mediation effects of social support and self-esteem between shyness and loneliness. Furthermore, a multi-group analysis found that shy male college students tend to have a more negative self-evaluation compared to their female counterparts. The results are discussed in terms of the conceptional context.

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1. Introduction

Numerous studies have been used to investigate the experience of apprehension and anxiety in social situations, including social anxiety, embarrassment, social phobia, communication apprehension and shyness (Amico, Bruch, Haase, & Sturmer, 2004; Crozier, 2000; Norton, Cox, Hewitt, & Mcleod, 1997). Since these negative experiences are common and likely to be universal (Cheek & Melchior, 1990), persistent and pervasive feelings of them may be linked to social and psychological problems, such as depression and loneliness (Schmidt & Fox, 1995; Tommaso & Spinner, 1997; Zhao, Kong, & Wang, 2012). Given the negative psychosocial consequences, it is of theoretical and practical importance to understand the underlying mechanisms between these variables. This study aimed to explore the mechanisms underlying the relationship between shyness and loneliness.

1.1. Shyness and loneliness

Shyness refers to an inhibition of expected social behavior, together with feelings of embarrassment and discomfort in social situations, especially those that involve strangers or unfamiliar people (Buss, 1985). Numerous studies have indicated a robust correlation between shyness and loneliness (e.g., Ashe & McCutcheon,

2001; Fitts, Sebby, & Zlokovich, 2009; Gökhan, 2010; Zhao et al., 2012). Ashe and McCutcheon (2001) pointed out that shy people demonstrated resistance in their emotion and attitude towards social interactions, which makes them reluctant to participate in social activities, thus leading to a strong sense of loneliness. According to Zhao et al. (2012), shy people tend to use few improvement strategies, such as adaptive humor, and more use of maladaptive humor, which is an important reason resulting in their loneliness.

1.2. Shyness, social support, self-esteem and loneliness

Although measures of shyness and loneliness typically show a correlation ranging from .40 to .50, shyness and loneliness are reliably correlated (Ashe & McCutcheon, 2001; Fitts et al., 2009; Jones, Rose, & Russell, 1990), the degree to which intervening variables mediate their relationship is not clear.

A review of the literature has identified one promising mediator between shyness and loneliness: Social support. A series of studies have emphasized the importance of adequate social support in preventing and reducing loneliness (e.g., Kong & You, in press; Perlman & Peplau, 1981), their results indicated that participants with higher levels of social support felt lower levels of loneliness. Research by Jackson, Fritch, Nagasaka, and Gunderson (2002) provided evidence supporting the mediating role of social support in the shyness–loneliness relationship. They pointed out that low levels of interpersonal competence in shy people predicted reductions in social support, and reductions in social support predicted increases in loneliness.

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Self-esteem has also been found to play a significant mediating role between shyness and loneliness (Zhao et al., 2012). Zhao et al. (2012) reported that shy individuals generally made a negative self-evaluation and lack of confidence in their social behaviors, which made them stay clear from social situations, thus enhancing their loneliness.

1.3. The current study

Although previous researches on mediating effects of social support and self-esteem has provided insight into underlying mechanisms to elucidate the relationship between shyness and loneliness, some further areas of investigation can be explored. First, testing the concurrent mediating effects of social support and self-esteem using the structural equation modeling, which has been examined separately, would extend our consolidated understanding of the mechanism how shyness and loneliness are connected. Previous research has found that a multi-mediator model may be more meaningful than a single-mediator model, because it may provide our relative importance of these mediators. For instance, Park, Heppner, and Lee (2010) found that only maladaptive coping might directly mediate between perfectionism and psychological distress, although the mediating effects of maladaptive coping and self-esteem have been examined separately in the previous literature. Second, we would use the multi-group analysis to identify whether there are significant gender differences in the mediational model. In addition, a noteworthy deficiency in the shyness literature is that most of the studies were executed within Western countries. Testing the mediation models in an Asian culture, would provide meaningful evidence for the external validity. Taken together, the present study tested the mediation effects of both social support and self-esteem between shyness and loneliness in Chinese college students.

2. Methods

2.1. Participants

The participants were 399 students (193 males and 206 females) from one college in Xi'an, a mid-sized city in the middle of China. The age range was 18–30 (M = 20.05, SD = 1.707).

2.2. Measures

2.2.1. Cheek and Buss shyness scale (CBSS)
The CBSS, developed by Cheek and Buss (1981) consists of 14 items, four of which are reverse scored. Sample items from the CBSS are "I feel nervous when together with unfamiliar people." and "I don't think it is difficult for me to ask some things from others." Each item is answered on a 5-point Likert type scale ranging from 1 = strongly disagree to 5 = strongly agree. The CBSS has good reliability and validity (e.g., Zhao et al., 2012). In this study, the Cronbach alpha coefficient for the CBSS was .82.

2.2.2. Multi-dimensional scale of perceived social support (MSPSS)
The MSPSS, developed by Zimet, Dahlem, Zimet, and Farley (1988) consists of 12 items to assess three sources of support: significant other (e.g., "There is a special person who is around when I am in need") (α = .85), family (e.g., "My family really tries to help me") (α = .85) and friends ("I have friends with whom I can share my joys and sorrows") (α = .88). The participants rated the items on a 7-point Likert-type response format (1 = very strongly disagree; 7 = very strongly agree). The MSPSS has good reliability and validity (e.g., Kong, Zhao, & You, 2012a, b). In this study, Cronbach alpha coefficient for the MSPSS was .92.

2.2.3. Rosenberg self-esteem scale (RSES)
The RSES, developed by Rosenberg (1965) consists of 10 items which are rated on a 4-point Likert scale from strongly agree to strongly disagree. Sample items from RSES are "I am able to do things as well as most other people." and "Ultimately, I tend to feel like a failure." The RSES has good levels of reliability and validity (Kong & You, in press; Zhao et al., 2012). In this study, the Cronbach alpha coefficient for the RSES was .82.

2.2.4. Emotional and social loneliness scale (ESLS)
The ESLS, developed by Wittenberg et al. (Wittenberg, 1986, cited in Shaver & Brennan, 1991) consists of 10 items (five of which are reverse scored) which are answered on a 5-point scale ranging from 1 = strongly disagree to 5 = strongly agree to measure emotional loneliness (e.g., "No one can make me feel intimate in a long time") (α = .61) and social loneliness (e.g., "Everyone around me seemed like a stranger") (α = .64). The ESLS has good levels of reliability and validity (Kong & You, in press; Zhao et al., 2012). In this study, Cronbach alpha coefficient for the ESLS was .67.

2.3. Procedure

Three hundred and ninety-nine students from a university in Xi'an voluntarily participated in the test. Self-report questionnaires were completed in a classroom after obtaining informed consent. It took about 15 min for the students to complete all the instruments.

2.4. Analysis strategy

The two-step procedure recommended by Anderson and Gerbing (1988) was employed to analyze the mediation effects. Firstly, the measurement model was tested to assess the extent to which each of the four latent variables was represented by its indicators. If the measurement model was accepted, then the structural model through the maximum likelihood estimation in AMOS 7.0 program was tested. Three item parcels were created for each of the shyness and self-esteem factors so as to control for inflated measurement errors due to multiple items for the latent variable. Because of the unequal numbers of items in each parcel, the average scores of the items were employed.

The goodness of fit of the model was evaluated by using the following indices (see Hu & Bentler, 1999; Quintana & Maxwell, 1999): chi-square statistics; root-mean-square error of approximation (RMSEA), standardized root-mean-square residual (SRMR): best if below .06; comparative fit index (CFI): best if above .95. In order to compare two or more models, Akaike Information Criterion (AIC: Akaike, 1987) with smaller values representing a better fit to the hypothesized model and Expected Cross-Validation Index (ECVI: Browne & Cudeck, 1993) with the smallest values shows the greatest potential for replication were additionally examined.

3. Results

3.1. Measurement model

The measurement model involved four latent constructs (shyness, social support, self-esteem and loneliness) and 11 observed variables. An initial test of the measurement model generated a very good fit to the data: χ^2 (38, N = 399) = 60.853; RMSEA = .039; SRMR = .033; and CFI = .99. All the factor loadings for the indicators on the latent variables were significant ((i.e., >.50, p < .001), indicating that the latent constructs were all well represented by their indicators. Moreover, as shown in Table 1, all the latent constructs were significantly correlated in conceptually expected ways.