

Assertiveness Moderates the Association Between Social Avoidance and Interpersonal Warmth

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Abstract

Social avoidance and distress are central manifestations of social anxiety and are associated with impaired interpersonal functioning. The present study examined whether assertiveness moderates the relationship between social avoidance and distress and interpersonal warmth. An analytic sample of 93 adults completed measures of social avoidance and distress, assertiveness, interpersonal warmth, and manipulative interpersonal tendencies. Pearson correlations and a moderation analysis were conducted. Controlling for gender and manipulative tendencies, social avoidance and distress was associated with lower interpersonal warmth, but only among individuals reporting moderate to high levels of assertiveness. No significant association was observed among individuals low in assertiveness. These findings suggest that assertiveness may influence the interpersonal correlates of social avoidance and distress and highlight heterogeneity in the interpersonal profiles of socially avoidant individuals.

Keywords: Social avoidance and distress; Social anxiety; Assertiveness; Interpersonal warmth; Social inhibition; Moderation analysis; Interpersonal functioning

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1. Introduction

Social anxiety is characterized by persistent fear, discomfort, and self-consciousness in situations involving potential social evaluation [1]. Two common manifestations of social anxiety are social avoidance, the tendency to withdraw from social interactions, and social distress, the anxiety and discomfort experienced during social encounters [2]. These tendencies are associated with impaired social functioning and reduced interpersonal engagement.

Social avoidance and distress are closely related to the broader constructs of shyness and social inhibition. Shyness is characterized by discomfort, self-consciousness, and inhibition in social situations [3]. Although shyness and social anxiety are conceptually distinct, both involve heightened interpersonal apprehension and increased tendencies toward withdrawal. Contemporary research suggests that shyness may function as a bridge between anxiety-related cognitive processes and socially avoidant behavior, linking experiences such as worry and self-doubt to observable patterns of withdrawal and solitude-seeking [4]. Accordingly, social avoidance and distress may be understood not only as symptoms of anxiety but also as interpersonal dispositions that shape social relationships.

Research demonstrates that social anxiety is associated with interpersonal difficulties. Individuals with elevated social anxiety report greater problems involving affiliation, intimacy, and social engagement, and these difficulties are often observable to close others rather than reflecting negative self-perceptions alone [5]. Contemporary interpersonal models likewise emphasize disruptions in affiliation, belongingness, and social rank processes as central features of social anxiety [6]. Together, these perspectives suggest that socially avoidant individuals may differ not only in anxiety and withdrawal but also in positive interpersonal characteristics.

One such characteristic is interpersonal warmth, encompassing qualities such as affection and “soft” emotions toward others. Warmth facilitates relationship formation and maintenance and is generally associated with

stronger social bonds and greater relationship satisfaction. Research indicates that social anxiety is associated with difficulties in affiliative and intimate interpersonal functioning [5], and contemporary interpersonal models identify disruptions in affiliation and belongingness as central features of social anxiety [6]. Consistent with these perspectives, social anxiety has been linked to reduced expressions of warmth and affiliative behavior and may influence how warmth-related interpersonal characteristics are perceived during social interactions [7]. However, many socially anxious or shy individuals continue to desire close relationships despite experiencing social discomfort. Consequently, social avoidance and distress may not uniformly predict interpersonal warmth. Moreover, it should be considered that self-reported warmth may not always reflect purely affiliative tendencies, as some individuals may portray themselves as especially warm, cooperative, or caring for instrumental interpersonal purposes [8].

One potentially important factor in this relationship is assertiveness. Assertiveness refers to the ability to express one's opinions, communicate personal needs, and defend one's beliefs in a direct and self-confident manner. Deficits in assertiveness have long been associated with social anxiety and interpersonal inhibition, making assertiveness training a common intervention strategy for socially anxious and shy individuals [9]. Contemporary perspectives likewise identify assertiveness as a multidimensional interpersonal skill associated with psychological adjustment and effective social functioning [10].

Assertiveness may be particularly relevant to understanding the interpersonal consequences of social avoidance and distress. Assertiveness reflects confidence in self-expression and self-advocacy, whereas interpersonal warmth reflects affection, tenderness, and emotional connection toward others. Although both are generally regarded as desirable characteristics, they represent distinct dimensions of interpersonal functioning. Consequently, socially avoidant individuals who are willing to express and defend themselves may differ meaningfully from those who are also low in assertiveness.

Although social avoidance is frequently associated with interpersonal inhibition, the interpersonal meaning of avoidance may differ across individuals [1]. Those low in assertiveness may avoid social situations primarily because they lack confidence expressing themselves despite retaining affiliative feelings toward others. In contrast, individuals who remain socially avoidant despite being willing to express and defend themselves may represent a different interpersonal profile characterized by reduced warmth or affiliation. From this perspective, assertiveness may alter the relationship between social avoidance and interpersonal warmth. Relatively little research has examined this possibility. Accordingly, the present study examined whether the association between social avoidance and distress and interpersonal warmth varies as a function of assertiveness.

2. Method

2.1 Participants

A total of 100 individuals participated in the study. Two participants were missing age data and four participants were missing gender data. Consequently, age statistics were based on 98 participants, and gender frequencies were available for 96 participants. Participants ranged in age from 18 to 29 years ($M = 19.18$, $SD = 1.95$). Of the participants reporting gender, 59 (61.5%) identified as women and 37 (38.5%) identified as men. Given missing data, the final analytic dataset for moderation was 93.

2.2 Procedure

Participants were recruited through social media and completed the study using a secure online survey platform. After providing informed consent, participants completed self-report measures described below and demographic characteristics. Participation was voluntary and unpaid, responses were anonymous, and all procedures were conducted in accordance with the ethical principles of the Declaration of Helsinki.

2.3 Measures

2.3.1 Social Avoidance and Distress

Social avoidance and distress were assessed using the 12-item Social Avoidance and Distress factor of the Shyness Scale developed by Jones et al. [11]. The scale measures tendencies toward social withdrawal, avoidance of social interactions, and discomfort in social situations. Participants rated each item on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree), with higher total scores indicating greater social avoidance and distress. Internal consistency in the current study was satisfactory (Cronbach's $\alpha = .921$).

2.3.2 Assertiveness

Assertiveness was assessed using three self-descriptive items reflecting confidence in self-expression and self-advocacy: assertive, willing to take a stand, and defends own beliefs. Participants indicated the extent to which each descriptor characterized them using a 7-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree). Responses were totaled to create an overall assertiveness score, with higher scores indicating greater assertiveness. Internal consistency was satisfactory (Cronbach's $\alpha = .714$).

2.3.3 Interpersonal Warmth

Interpersonal warmth was assessed using four self-descriptive items reflecting affiliative and emotionally warm interpersonal characteristics: affectionate, gentle, warm, and tender. Participants rated the extent to which each descriptor described them using a 7-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree).

Responses were averaged to create an overall interpersonal warmth score, with higher scores indicating greater interpersonal warmth. Internal consistency was satisfactory (Cronbach's $\alpha = .917$).

2.3.4 Manipulative Interpersonal Tendencies

Manipulative interpersonal tendencies were assessed using the four-item Machiavellianism subscale of the Dirty Dozen [12]. The scale assesses a tendency toward manipulative, deceptive, and exploitative interpersonal behavior through items such as using deceit, manipulation, flattery, and exploitation to achieve personal goals. Participants responded on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Responses were totaled to create an overall score, with higher scores indicating greater manipulative interpersonal tendencies. Internal consistency in the present sample was satisfactory (Cronbach's $\alpha = .875$).

2.4 Statistical Analysis

SPSS for Windows was used for statistical analyses. Descriptive statistics and Pearson product-moment correlations were computed to examine bivariate associations among social avoidance and distress, assertiveness, interpersonal warmth, manipulative interpersonal tendencies, and gender. These analyses were conducted to characterize the sample and evaluate zero-order relationships among the study variables.

To address the primary research question, a moderation analysis was conducted using PROCESS Version 4.2 for SPSS [13], Model 1. Social avoidance and distress was specified as the predictor variable, interpersonal warmth as the outcome variable, and assertiveness as the moderator. Gender and manipulative interpersonal tendencies were included as covariates. Gender was included based on preliminary analyses indicating significant associations with warmth. Manipulative interpersonal tendencies were controlled because self-reported warmth may, in some cases, reflect strategic communal self-presentation rather than purely affiliative tendencies [8]. Controlling these tendencies was intended to provide a more conservative estimate of interpersonal warmth.

Regression coefficients were estimated using ordinary least squares regression. Statistical inference was based on 95% bootstrap confidence intervals generated from 10,000 bootstrap samples. Moderation was evaluated by testing the interaction between social avoidance and distress and assertiveness. When a significant interaction was observed, conditional effects of social avoidance and distress on interpersonal warmth were examined at low (16th percentile), moderate (50th percentile), and high (84th percentile) levels of assertiveness, consistent with PROCESS conventions. Effects were considered statistically significant when the 95% confidence interval did not include 0.

3. Results

Preliminary analyses examined gender differences on the study variables using independent-samples *t* tests. A significant gender difference emerged for interpersonal warmth, with women reporting higher levels of warmth than men, $t(94) = -2.30$, $p = .024$, $d = 0.48$. No significant gender differences were observed for social avoidance and distress, assertiveness, or manipulative interpersonal tendencies ($ps > .05$). Given the observed association between gender and interpersonal warmth, gender was included as a covariate in subsequent analyses.

Descriptive statistics and Pearson correlations for all study variables are presented in Table 1. Social avoidance and distress was negatively associated with both assertiveness, $r = -.35$, $p < .001$, and interpersonal warmth, $r = -.26$, $p = .009$. Assertiveness was positively associated with manipulative interpersonal tendencies, $r = .29$, $p = .003$, whereas interpersonal warmth was negatively associated with manipulative interpersonal tendencies, $r = -.25$, $p = .013$. Assertiveness was not significantly associated with interpersonal warmth, $r = .10$, $p = .329$, and manipulative interpersonal tendencies were unrelated to social avoidance and distress, $r = .00$, $p = .992$.

Table 1: Descriptive Statistics and Pearson Correlations Among Study Variables

Variable	M	SD	1	2	3
1. Social Avoidance and Distress	23.81	9.45	—		
2. Assertiveness	15.88	3.15	-.35**	—	
3. Interpersonal Warmth	20.25	5.49	-.26**	.10	—
4. Manipulative Interpersonal Tendencies	9.18	4.13	.00	.29**	-.25*

Note. $N = 97-100$. Values are Pearson correlation coefficients. Social Avoidance and Distress scores could range from 12–60, Assertiveness scores from 3–21, Interpersonal Warmth scores from 4–28, and Manipulative Interpersonal Tendencies scores from 4–20. * $p < .05$, ** $p < .01$.

A moderation analysis was conducted using PROCESS Model 1 to examine whether assertiveness moderated the association between social avoidance and distress and interpersonal warmth while controlling for gender and manipulative interpersonal tendencies (Table 2). The overall model was significant, $F(5, 87) = 5.17$, $p < .001$, accounting for 22.9% of the variance in interpersonal warmth ($R^2 = .229$). The interaction between social avoidance and distress and assertiveness was significant, $B = -0.04$, $SE = 0.02$, $p = .036$, contributing an additional 4.0% of explained variance ($\Delta R^2 = .040$). Conditional effects analyses indicated that social avoidance and distress was unrelated to interpersonal warmth at low levels of assertiveness ($B = -0.02$, $p = .767$) but was negatively

associated with interpersonal warmth at moderate ($B = -0.13$, $p = .032$) and high ($B = -0.24$, $p = .005$) levels of assertiveness. Thus, the negative association between social avoidance and distress and interpersonal warmth became stronger as assertiveness increased.

Table 2: Moderation Analysis Predicting Interpersonal Warmth

Predictor	B	SE	t	p	95% CI
Social Avoidance and Distress	0.454	0.276	1.64	.104	[-0.095, 1.002]
Assertiveness	1.187	0.499	2.38	.020	[0.196, 2.178]
Social Avoidance $\times$ Assertiveness	-0.037	0.017	-2.13	.036	[-0.071, -0.002]
Gender (1 = men, 2 = women)	2.610	1.079	2.42	.018	[0.466, 4.754]
Manipulative Interpersonal Tendencies	-0.383	0.132	-2.90	.005	[-0.646, -0.121]

Model statistics: $R^2 = .229$, $F(5, 87) = 5.17$, $p < .001$.

Note. Interpersonal warmth was the outcome variable. Gender and manipulative interpersonal tendencies were covariates. Confidence intervals are 95%.

4. Discussion

The present study examined whether assertiveness moderates the association between social avoidance and distress and interpersonal warmth. Consistent with previous research linking social anxiety to interpersonal difficulties [5], social avoidance and distress was negatively associated with interpersonal warmth at the bivariate level. More importantly, assertiveness moderated this relationship. Social avoidance and distress was unrelated to interpersonal warmth among individuals low in assertiveness but was associated with lower interpersonal warmth at moderate and high levels of assertiveness. Thus, the negative relationship between social avoidance and distress and interpersonal warmth became stronger as assertiveness increased.

These findings suggest that socially avoidant individuals may not constitute a psychologically homogeneous group. Contemporary interpersonal perspectives conceptualize social anxiety as involving disruptions in affiliation and belongingness [6]. However, the present results indicate that the interpersonal implications of social avoidance may depend partly on other interpersonal characteristics. Individuals who reported both elevated social avoidance and relatively high assertiveness also reported lower interpersonal warmth, whereas no such relationship emerged among less assertive individuals.

One useful framework for interpreting this pattern is the distinction between agency and communion. Assertiveness reflects an agentic orientation characterized by self-expression and self-advocacy, whereas warmth reflects a communal orientation emphasizing affection, tenderness, and interpersonal connection [14,15]. Although both characteristics are generally viewed positively, they represent distinct dimensions of interpersonal functioning. Consistent with this distinction, assertiveness was not significantly correlated with interpersonal warmth in the present sample. The moderation effect therefore suggests that social avoidance may have different interpersonal correlates depending on an individual's broader interpersonal style. Among less assertive individuals, social avoidance may primarily reflect inhibition and discomfort in social situations. In contrast, among more assertive individuals, elevated social avoidance appears to be associated with reduced interpersonal warmth, suggesting a qualitatively different interpersonal profile.

The findings may also have implications for interventions targeting social inhibition. Assertiveness training remains a common approach for individuals experiencing shyness, social anxiety, and interpersonal inhibition [9]. The present results suggest that assertiveness should not necessarily be viewed as synonymous with interpersonal warmth or affiliation. Although assertive behavior may facilitate self-expression and social participation, it may not correspond to greater affection, tenderness, or emotional warmth toward others. Future research examining changes in both assertiveness and affiliative functioning following intervention may help clarify these relationships.

Several limitations should be noted. First, the cross-sectional design precludes causal conclusions regarding the relationships among social avoidance, assertiveness, and interpersonal warmth. Second, all variables were assessed through self-report, raising the possibility of shared method variance and self-presentational biases. Relatedly, both the assertiveness and warmth measures, though adequately reliable, were brief and not validated. Third, the sample consisted primarily of young adults recruited through social media, potentially limiting generalizability to other populations. Finally, given the exploratory nature of the study and modest sample size, replication using larger community samples is warranted, particularly using broader and validated measures.

Despite these limitations, the present findings contribute to the literature on the interpersonal dimensions of social anxiety and social inhibition. Previous research has emphasized the role of social anxiety in interpersonal difficulties and disruptions in affiliative functioning [5,6,16]. The present study extends this work by suggesting that the relationship between social avoidance and interpersonal warmth depends, in part, on levels of assertiveness. Further research examining the interplay among social avoidance, assertiveness, and affiliative functioning may help clarify the diverse interpersonal profiles associated with social inhibition.

5. References

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