

# Meditating Influence of Social Interaction Anxiety on the Relationship Between Diversity Appreciation and Self-Efficacy for Teamwork



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## Abstract

This research study examines the mediating influence of social interaction anxiety (SIA) on the relationship between diversity appreciation (DA) and self-efficacy for teamwork with team-mates who are perceived as significantly different (SETD). Two hundred and seventy-six undergraduate business management students completed self-assessment measures of DA and SETD, and identified a close associate who completed an observer version of the social interaction anxiety scale (M-GUDS-S). Product moment correlations were used to examine the hypothesized relationships between SETD and both DA and SIA, and both the Hayes process and the Sobel test was used to test the hypothesis that SIA mediates the relationship between DA and SETD. SETD was significantly correlated with both DA ( $r = 0.32, p < 0.01$ ) and SIA ( $r = -0.45, p < 0.01$ ). DA was significantly correlated with SIA ( $r = -0.35, p < 0.01$ ). Both the Hayes process and Sobel test ( $Z = 4.66, p < 0.001$ ) confirmed that SIA partially mediated the relationship between DA and SETD. Educators and practitioners need to be aware of the influence of DA and SIA on SETD. Team development interventions that integrate activities oriented toward both diversity appreciation and reduction in social interaction anxiety should improve team member confidence in their ability to work in teams with team-mates who they perceive as significantly different from themselves.

**Keywords:** Social Interaction Anxiety; Diversity; Diversity Appreciation; Attitude toward Diversity; Teamwork; Self-Efficacy for Teamwork

## Introduction

Many organizations are making strategic commitments to diversity and inclusion [1]. These commitments have moral, legal, reputational, and utilitarian dimensions [2,3]. The utilitarian perspective is based on the general performance formula that diversity plus inclusion equals improved performance [4-8]. Workplace diversity refers to both actual and perceived differences among people at work [9,10], whereas inclusion refers to the extent of participation, contribution and influence within important organizational processes, and feeling valued due to treatment that satisfies needs for both belongingness and uniqueness [11-13]; Roberson, 2006; [14,15]. Research on the general performance formula has produced mixed results suggesting that the diversity-inclusion-performance network of relationships (DPIM) is not sufficiently specified [10, 16-18].

The dominant theoretical model supporting the DIPN is the Categorization-Elaboration Model (CEM) [19]. The CEM explains the mixed research results by means of two independent but interacting processes. Diversity constrains dysfunctional majority influences and supports information elaboration which improves decision-making (process 1) [10, 20-22]. Diversity may also encourage social categorization, in-out group perceptions, and dysfunctional team dynamics arising from interpersonal resistance, rejection, and exclusion (process 2) [6, 19, 22, 23, 24]. Optimal distinctiveness theory (ODT) suggests that group participation is motivated by needs for engagement with supportive groups that can provide and reinforce preferred identities without loss of desired individuation [25-28]. Participation therefore involves decisions about the potential of

group members and groups to satisfy needs for support, identity, and individuation, which helps determine the attractiveness of the group. Preference for groups that appear to possess greater likelihood of being supportive and reinforcing preferred identities makes similarity both an attractive feature and influential within the dynamics of group attachment, identification, commitment, functioning and performance [29-31].

Perspectives about performance variation within the DIPM include both the big picture (net process benefit) and missing variables viewpoints. The big picture (net process benefit) perspective suggests that although heterogeneity is often associated with process losses arising from complex communication, less cohesion, and more conflict; the productivity benefits arising from a varied range of contacts, more diverse input, and creative friction, often outweighs the losses (need to see the full picture) [32]. The missing variables approach suggests that the mixed research results arise mostly from a set of key mediating and moderating variables that have not yet been fully revealed and managed. Reliably capturing the benefits of diversity will depend on identifying, clarifying and managing the influential mediators and moderators within the DIPM [19, 22, 33-36]. Identifying key moderating influences within process 1 of the DIPM (diversity-information elaboration process) should help address concerns that the diversity-information elaboration relationship is overly simplistic. Research confirms that workgroup diversity is often associated with tension and conflict that can disrupt communication and information sharing [37]. Moderating influences like cooperative conflict management and the opportunity to reflect on and discuss team functioning appear to assist in establishing a more reliable diversity-information elaboration process [38,39].

Sources of moderation within process 2 of the DIPM (experience of differences) include both salience of differences and attitudes toward diversity [6,40]. The salience perspective suggests that the extent to which differences are noticed, focused on, and influential within the perceptual process varies among individuals and groups, which may reveal different diversity-inclusion-performance relationships at different levels of salience [41,42]. Individuals and groups that are less attentive to differences that typically get entangled within social resistance processes may be less likely to introduce social impediments into the diversity-inclusion-performance system [6,43]. Diversity appreciation refers to the influence of attitudes toward diversity on experiences, orientations, and responses to differences [40]. Research on positive attitudes toward diversity suggests that diversity appreciation supports improved functioning of the DIPM within both core processes [40,44]. Diversity appreciation may assist the diversity-information elaboration process via improved engagement and knowledge sharing [45], and may also constrain or prevent socially disruptive experiences of differences and promote more collaborative and productive relationships. Attitudes towards diversity, and in particular appreciation of

diversity, is an important variable whose determinants and influences require further research [40]. This research study examines the mediating influence of social interaction anxiety on the relationship between diversity appreciation and self-efficacy for teamwork.

### Variables

#### Dependent Variable – Self-Efficacy for Teamwork

Social cognitive theory [46] suggests that cognitive processing of social information influences human performance. Beliefs about one's ability to mobilize sufficient effort, cognitive resources, and the behavioral strategies necessary for successful task completion, are important determinants of performance and satisfaction [47]. Self-efficacy is generally defined as the perceived capacity to perform tasks [48], and is developed through mastery experiences, exposure to performance modeling, social persuasion, and judgements about performance readiness [49,50]. Positive or negative efficacy information is generated by evaluating task requirements, related personal experiences, and relevant personal and situational resources and constraints [51]. Numerous studies have confirmed self-efficacy as a valid predictor of satisfaction, effort, persistence, and performance across a wide range of tasks [51-54]. Meta-analysis of the efficacy-performance relationship suggests that efficacy is one of the better general predictors of performance [55,56].

Development and measurement of the self-efficacy construct has included global, domain, and task specific dimensions suggesting that efficacy assessments occur at different levels of specificity [57-59]. The inclusion of domain and task specific efficacy has given risen to numerous task and contextually oriented forms of efficacy, like efficacy for teaching [60], career decision making (Zhou et al., 2021), smoking cessation [61] and teamwork [62-65].

The expanding use of teams within the workplace and higher education has increased the importance of researching the key determinants of team performance, including various forms of team related efficacies [66,67]. Research on student and organizational teams has mostly used the aggregation of team member general self-efficacy or efficacy beliefs about team performance as a measure of team efficacy (potency) [68]. Research suggests that team efficacy (potency) is an important determinant of student and organizational team performance [69,70], and a mediator of the team inputs-performance relationship [71]. Research has also identified a relationship between self-efficacy for teamwork and both team member effectiveness and team performance [72,73]. Multiple research studies conducted by Coetzer [74-77] identified relationships between self-efficacy for teamwork and a variety of individual level variables like task attentiveness, critical thinking, cooperative conflict management, and role stress. This suggests that self-efficacy for teamwork is an important part of the efficacies that influence team member and team performance.

Team related efficacies continue to be contextualized as new forms of teamwork emerge like technology mediated team work (Konak & Kulturel-Konak, 2019). Application of the DIPM to teams has also produced mixed results resulting in an ongoing search for key mediators and moderators that more reliably specify the model at the team level (Lim & Lim, 2006; Meyer, 2017; Van Knippenberg, Van Ginkel & Homan, [78]. The increasingly emphasis on teamwork with diverse team members combined with the key mediating role of efficacy supports further contextualization of self-efficacy for teamwork with an emphasis on teamwork with team-mates who are perceived as significantly different from oneself. Searches of the popular databases of published research studies produced no recent research on constructs or associated measures of self-efficacy for teamwork with team mates who are perceived as significantly different. This research study examines the influence of both diversity appreciation and social interaction anxiety on self-efficacy for teamwork with team-mates who are perceived as significantly different.

### Independent Variable – Diversity Appreciation

Attitude toward diversity is generally defined as beliefs about the value of diversity [79]. Research has confirmed that people possess differing attitudes and preferences regarding the dissimilarity of others that influences their social behavior [80-82]. Research by Miville et al. [83] described a positive attitude toward diversity as “an attitude toward all other persons that is inclusive yet differentiating in that similarities and differences are both recognized and accepted; the shared experience of being human results in a sense of connectedness with people and is associated with a plurality or diversity of interactions with others (p. 252).” Attitudes are comprised of cognitive, affective, and behavioral intention components [84]. The cognitive component of attitude toward diversity refers to the recognition, acceptance and valuing of differences. Behavioral intention is associated with seeking diverse interactions, whereas the affective component refers to the sense of connection with diverse others arising from the shared experience of being human. Research supports these components of diversity appreciation which have been labeled as relativistic appreciation, diversity of contact, and sense of connection with others who are different (comfort with differences) [85,86]. Research on pro-diversity attitudes have identified a positive effect on social integration [87,88], information elaboration [88], creativity (Nakui,Paulus, & Van Der Zee, 2011), prevention of non-productive in-out group perceptions [88] and team performance [88] Nakui, Paulus & van der Zee; 2011). Searches of the popular research publication databases produced no recent studies that examined the influence of attitudes about diversity on self-efficacy for teamwork with diverse team-mates and social interaction anxiety.

### Mediating Variable – Social Interaction Anxiety Scale

Social interaction anxiety refers to distress that is experienced when initiating, responding to, and maintaining social engagement

with people who are familiar, strangers or potential mates ([89]. The experience includes concerns about being inarticulate, boring, sounding stupid, not knowing what to say, being confused about what to do, and being ignored [90]. Social interaction anxiety is different from more general experiences of anxiety due to the specificity and structure of the situations in which the anxiety occurs [91]. Responses in interpersonal contexts are continuously contingent upon and enacted in response to the evolving actions of others, whereas behavior in non-contingent situations is predominantly influenced by personal intentions [90].

The theoretical framework of social interaction anxiety is based on the nature and interaction of three major brain systems - behavioral approach system (BAS), fight-flight-freeze system (FFFS) and the behavioral inhibition system (BIS) [92]. The BAS manages reward seeking behavior (Pickering & Gray, 1999), whereas the FFFS manages self-protection [93], and the BIS manages conflicts that arise between the BAS and the FFFS [94]. The BIS uses cognitive and physiological systems that manage arousal, attention, risk assessment and strategy development [95]. The FFFS is associated with the emotion of fear whereas the BIS is associated with the emotion of anxiety [96]. Each system possesses varying levels of sensitivity including both excessively low and high levels that contribute to dysfunction. High sensitivity within the BIS system is associated with hypersensitivity toward punishment cues and increases the risk of internalization disorders [96], whereas high sensitivity within the BAS system is associated with hypersensitivity toward reward cues and increases the risk of externalization disorders [93]. Reinforcement sensitivity theory (RST) suggests that social anxiety arises from a combination of high sensitivity within the BIS and low sensitivity within the BAS [97]. High sensitivity within the BIS system means that individuals will exhibit more severe anxiety and resistant reactions in response to social stimuli that is perceived as potentially punitive, and low sensitivity within the BAS system means that there is limited motivation to be assertive and confront such challenges [98]. The combination may help produce intense and unchecked social anxiety that is disruptive of social functioning (Kimbrel, Mitchell & Nelson-Gray, 2010).

Unlike constructs and measures of general trait and state anxiety, little research has been conducted on developing constructs and measures that distinguish between trait and state social interaction anxiety. Measures of both state and trait forms help to identify whether current performance conditions are influencing BIS sensitivities toward punishment cues and BAS insensitivity toward reward cues (are current conditions encouraging a state that is not present in patterns over an extended period, suggesting significant current situational influences). Critique of the current context and nature of diversity advocacy and promotion includes reference to potentially punitive approaches [99,100,101,102]. These may introduce, reinforce and heighten the sensitivity of punishment cues and reduce the sensitivity of reward cues. This suggests that the examination of

both trait and state social interaction anxiety is potentially useful within performance contexts where participant and stakeholder diversity is prevalent and salient.

Current measures of social interaction anxiety like the social interaction anxiety scale (SIAS) [90] predominantly focus on SIA as a disorder. Disorder oriented variables have traditionally been associated with early onset, long duration and relatively stable aspects of personality that are measured in a categorical manner (non-disordered vs. disordered). Research has confirmed that symptoms and impairment associated with disorder variables typically fall along a progressive dimensional continuum (gradations of severity) as opposed to simple bifurcation [103-105], and that disorders may have trait (long term) and state (episodic, temporary, short term etc.) components [106]. The measurement of social interaction anxiety in this study emphasizes social interaction anxiety as a state by focusing predominantly on current behavior.

Organizational behavior research on the influence of social anxiety has identified associations with a variety of variables including receptivity toward training [107], interaction in virtual teams ([108], willingness to seek help from others at work [109], workplace bullying [110], and managerial performance [111]. Research has confirmed a negative association between social anxiety and various forms of self-efficacy like general self-efficacy (Khosroshahi & Hashemi, 2012) coping efficacy [[112], self-presentational efficacy [113] and cognitive reappraisal self-efficacy [114]. Research conducted by Lukasik & Witek [115] identified a negative association between anxiety (state/trait) and self-efficacy for teamwork among adolescents. Searches of the popular research publication databases produced no recent studies that examined the influence of social interaction anxiety on self-efficacy for teamwork with diverse team-mates.

## Hypotheses

The general proposition guiding this research is that SETD is positively related to DA and negatively related to SIA, DA is negatively related to SIA, and SIA mediates the relationship between DA and SETD. Expanding engagement and interdependence among increasingly diverse participants and stakeholders, particularly within higher education and the workplace, has elevated the centrality and importance of personal experiences and responses to diversity. People who have more positive attitudes and expectations about engaging others in their academic and work life who they experience as significantly different from themselves, are more likely to have productive experiences, especially within an increasingly diverse performance environments. They are also more likely to experience themselves as more ready to work in teams with team-mates they experience as significantly different. This should produce greater personal confidence in successfully working with team-mates they experience as significantly different from themselves.

H1: Appreciation of diversity is positively associated with self-efficacy for teamwork with team-mates who are perceived as significantly different from oneself

Social anxiety constrains various forms of self-efficacy, including efficacy for teamwork among adolescents (Khosroshahi & Hashemi, 2012; [112,115]. Social interaction anxiety constrains willingness to receive assistance from others, increases social aggression, and reduces social performance ([108, 110, 111]. Concerns about being inarticulate, sounding stupid, not knowing what to say, and being confused about what to do; are likely to prevent or constrain experiences of performance readiness and successful engagement within most team situations, including teamwork with team-mates who are experienced as significantly different from oneself.

H2: Social interaction anxiety is negatively associated with self-efficacy for teamwork with team-mates who are perceived as significantly different from oneself

A positive attitude toward diversity should reduce the extent to which social interaction cues excessively activate the BIS and associated feelings of anxiety. Diversity appreciation should also stimulate the BAS due to the expectation of rewarding engagements with others who are perceived as different. This combined effect should prevent or constrain the emergence of disruptive interpersonal apprehension, caution, and resistance. Reduced concerns about saying the wrong thing, sounding stupid, not knowing what to say, being confused about what to do, and the need to maintain a resistant posture, combined with the expectation of positive engagement outcomes with a wide variety of people, should constrain social interaction anxiety.

H3: Diversity appreciation will be negatively associated with social interaction anxiety

The input-process-output model of team functioning suggests that inputs in part transformed into outputs via various team states and processes [7, 64, 116]. Research suggests that team member attributes can have both a direct impact on performance and an indirect impact via their influence on key team states and processes [117]. Variables like social interaction anxiety that constrain successful interaction, performance and confidence, should mediate relationships between team member attributes that influence both social interaction and confidence.

H4: Social interaction anxiety will mediate the relationship between diversity appreciation and self-efficacy for teamwork with team-mates who are perceived as significantly different from oneself

## Subjects and Methods

### Sample

The subjects were two hundred and seventy-six undergraduate business students attending a public university in the United States. The average age of the subjects was 20.25

(low = 18, high = 35), and 53 % identified as male and 47% as female. Each subject completed a self-assessment of diversity appreciation and self-efficacy for teamwork under conditions of anonymity. Procedures recommended by Podsakoff, MacKenzie, Lee & Podsakoff [118] for addressing common method bias were used by administering the surveys at different times and generating psychological separation by associating them with different components and activities within the course. Each subject was also asked to identify someone who knew them well and would be willing to complete an honest assessment of their current social behavior and demeanor when interacting with others. The identified observers completed an online version of the social interaction anxiety scale under conditions of anonymity. This scale was considered appropriate for observer use given that all the questions referenced specific observable behaviors.

### Measures

#### Appreciation of Diversity

The short form of the Universality-Diversity Scale (M-GUDS-S) developed by Feurtes et al. (2000) and further validated by Kottke [86] was used to measure appreciation of diversity. The M-GUDS-S has been validated across multiple cultures [119]. The original and long form of the scale was developed and validated by Miville et al. [83], and measures the dimensions of diversity of contact, relativistic appreciation, and sense of connection (comfort with differences). Diversity of contact assesses interest in engaging and learning about people who are different, whereas relativistic appreciation assesses attitudes toward differences and similarities. Sense of connection and comfort with differences assesses discomfort in relating to people who are different. The Universality-Diversity Scale has been associated with individual level variables like identity formation, empathy, dogmatism; and team-oriented variables like aptitude for teamwork and interest in teamwork [120]. The M-GUDS-S contains 15 items with 5 items measuring diversity of contact (e.g. "I would like to join an organization that emphasizes getting to know people from different countries"), 5 items measuring relativistic appreciation (e.g. "Knowing how a person differs from me greatly enhances our friendship"), and 5 items measuring sense of connection and comfort with differences (e.g. "I am only at ease with people of my own race"). Items were measured on a seven-point Likert scale (1 = strongly disagree, 2 = disagree, 3 = slightly disagree, 4 = neither agree nor disagree, 5 = slightly agree, 6 = agree, 7 = strongly agree). The total score for appreciation of diversity was derived by adding up the scores on each of the questions.

#### Self-Efficacy for Teamwork

Self-efficacy for teamwork with team-mates who are perceived as significantly different from oneself was measured by slightly amending a scale developed by Coetzer and Richmond [74] for measuring self-efficacy for teamwork. This scale has been used in multiple studies to examine the influence of individual level

cognitive, emotional, and behavioral variables on self-efficacy for teamwork [74, 76, 77]. Scale items were developed to measure individual team member confidence in their ability to support a team to set team goals, create a division of labor, manage team tasks, integrate team member contributions, promote communication and constructive relationships, resolve problems and conflicts, provide leadership and motivation, and achieve the team's overall goal through direct contributions to the team's task. In order to focus the respondents on teamwork involving team-mates who are perceived as different, the instructions for completing the questionnaire asked the respondents to focus on teams that included team-mates who on average were significantly different from the respondent. The measure contains 16 items and example items are "I have the ability to coordinate the tasks and activities of team members," "I have the ability to energize and keep a team focused on completing key tasks," "I have the ability to build effective relationships with and between team members," and "I have the ability to contribute useful ideas and help a team complete key tasks." Items were measured on a seven-point Likert scale (1 = strongly disagree, 2 = disagree, 3 = slightly disagree, 4 = neither agree nor disagree, 5 = slightly agree, 6 = agree, 7 = strongly agree). A total self-efficacy for teamwork score was derived by adding up the scores on each of the questions.

#### Social Interaction Anxiety Scale

An observer version of the short form of the social interaction anxiety scale (SIAS-6) was used to measure social interaction anxiety. The short form of the Social Interaction Anxiety Scale (SIAS) was developed and validated by Peters et al. [121] (M-GUDS-S) and further validated across multiple cultures [122]. The original and long version of the SIAS was developed and validated by Mattick and Clark [90], and further validated by Carleton et al. [123]. The social interaction anxiety scale has been extensively used in both research and practice to identify and manage the influence of SIA within important performance networks, including workplace performance [111]. An observer version of the social interaction scale was used to remove the potential influence of common method bias given that the other measures in the study used a self-report format. An observer version was considered feasible given that all the items reference specific observable behavior. The observer version of the M-GUDS-S contains 6 items and example items are "(person being observed) has difficulty making eye contact with others," "(person being observed) finds it difficult mixing comfortably with others," "(person being observed) has difficulty talking with other people," and "(person being observed) has difficulty disagreeing with another's point of view." Items were measured on a seven-point Likert scale (1 = strongly disagree, 2 = disagree, 3 = slightly disagree, 4 = neither agree nor disagree, 5 = slightly agree, 6 = agree, 7 = strongly agree). Each subject was asked to identify someone who knew them well and would be willing to complete an honest assessment of their current social behavior and

demeanor when interacting with others. The identified observers completed an online version of the instrument under conditions of anonymity. A total score for social interaction anxiety was generated by adding up the scores on the questions.

**Result**

**Descriptives**

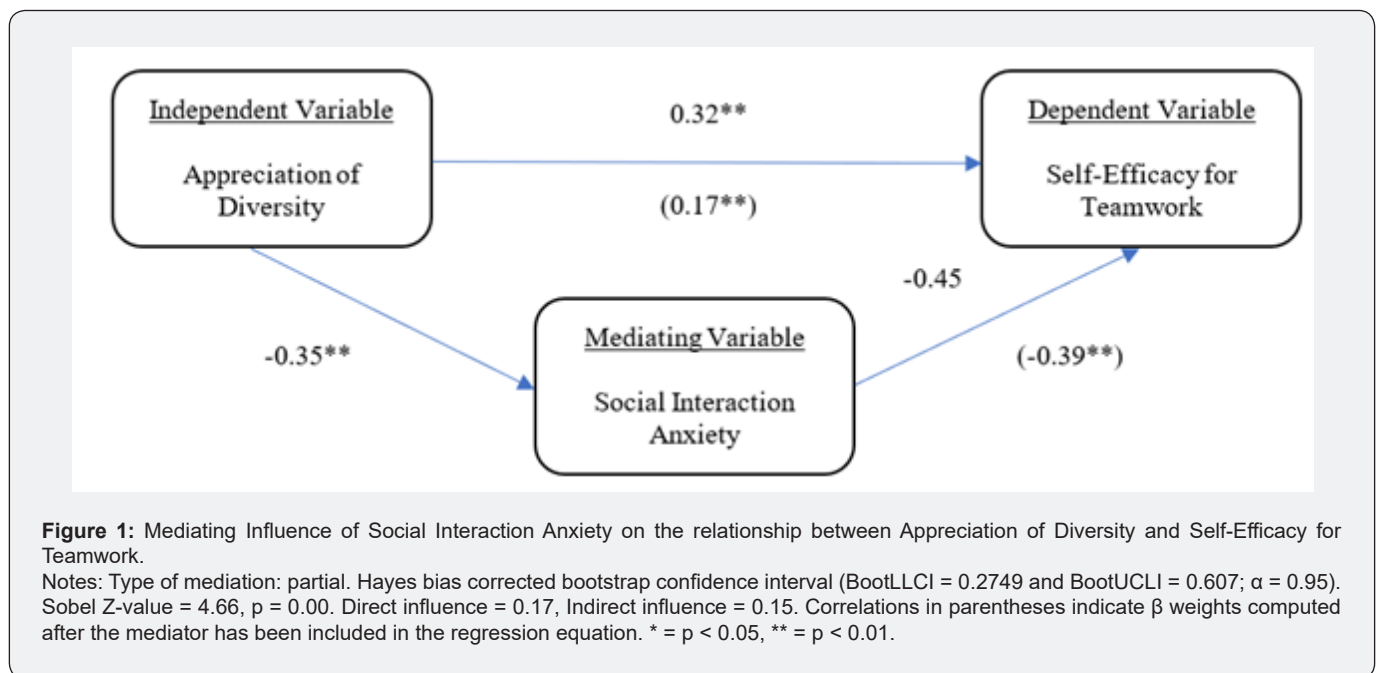
Means, standard deviations and correlations among the research variables are reported in table 1. All variable distributions are approximately normal and demonstrate reasonable variability

across their respective scales. Cronbach alpha coefficients ranged from 0.79 to 0.85 suggesting good internal reliabilities. No univariate or bivariate outliers were considered problematic and product moment correlations revealed significant associations between the variables. The distribution of regression residuals produced by the mediation regression was approximately normal with no problematic outliers. The standardized regression coefficients for the control variables of age and gender were  $\beta = -0.02$  ( $p = 0.59$ ) and  $\beta = 0.06$  ( $p = 0.19$ ) respectively, suggesting that neither had significant influence within the meditation model.

**Table 1:** Means, Standard Deviations, Internal Reliabilities and Correlations.

		Mean	SD	1	2	3	4
1	Self-efficacy for Teamwork	87.92	12.54	0.84			
2	Social Interaction Anxiety	25.66	7.798	-0.45**	0.85		
3	Diversity Appreciation	64.92	13.25	0.32**	-0.35**	0.79	
4	Age	20.25	2.62	0.01	-0.06	-0.01	
5	Gender			0.08	-0.03	-0.02	0.07

Notes: Internal consistency reliabilities are shown in parentheses on the diagonal  
 \* =  $p > 0.05$  (2-tailed), \*\* =  $p > 0.01$  (2-tailed)



**Empirical Tests of Hypotheses**

The significant threshold for all the empirical tests was set to  $\alpha = 0.05$  (2-tailed). The correlation between DA and SETD is statistically significant ( $r = 0.32$ ,  $p < 0.01$ ) providing support for the hypothesis that DA is positively associated with SETD. The correlation between SIA and SETD is statistically significant ( $r = -0.45$ ,  $p < 0.01$ ) providing support for the hypothesis that SIA is

negatively associated with SETD. The correlation between DA and SIA is statistically significant ( $r = -0.35$ ,  $p < 0.01$ ) providing support for the hypothesis that DA is negatively associated with SIA. The Sobel test for mediation is statistically significant ( $Z = 4.66$ ,  $p = 0.00$ ) and the Hayes bias corrected bootstrap confidence interval (BootLLCI = 0.2749 and BootUCLI = 0.607;  $\alpha = 0.95$ ) does not contain zero suggesting the presence of mediation. The

mediation results suggest that a statistically significant portion of the relationship between DA and SETD is the result of social interaction anxiety (direct influence = 0.17 and indirect influence = 0.15) (Figure 1). A significant partial correlation between DA and SETSD ( $r = 0.17, p < 0.01$ ) remains after including the mediator (SIA) in the regression. This suggests that SIA does not fully explain the association between DA and SETD, and that other unmeasured factors are helping to transmit the effect.

## Discussion

The results suggest that SETD is positively associated with DA and negatively associated with SIA, DA is negatively associated with SIA, and SIA partially mediates the relationship between DA and SETD. The directionality of this relationship cannot be confirmed from this research study and both opposite and bi-directional effects are possible. Although the measure of social interaction anxiety in this study examined current disposition (state), there was no way to determine whether current disposition was an extension of long-term patterns (trait) or something different. Treating social interaction anxiety as a trait might support placing SIA prior to DA (trait supports formation of the attitude). In order to fully examine the influence of both trait and state influences of social interaction anxiety within diverse social conditions, measures that both focus on social interaction with others who are perceived as significantly different, and distinguish between state and trait dimensions, may be useful. This may also better support research on current environmental influences that encourage changes in behavioral patterns and increase social interaction anxiety related to diverse social situations. Identifying environmental conditions that are increasing the sensitivity of punishment cues, encouraging more intense activation of the BIS, lowering reward sensitivities, and deactivating the BAS, may help improve the DIPM. This also reinforces the importance of salience and sensitivity variables [124-132].

## Implications for Organizations and Academic Institutions

Research has confirmed that both diversity appreciation and a variety of teamwork related efficacies are positively associated with team performance [40, 72, 73]. This research study confirms that diversity appreciation is positively associated with self-efficacy for teamwork with team-mates who are experienced as significantly different from oneself, and that social interaction anxiety partially mediates the relationship. The results support use of an intervention framework and foci in which diversity appreciation (attitude) promotion is primary and social interaction anxiety is important but secondary in order to address socially disruptive experiences and behavior that is resistant to changes in attitude. A critical mass intervention perspective suggests that maximum effectiveness will be achieved through education, training, coaching and other development activities that focus on and integrate both diversity appreciation promotion

and interaction-anxiety reduction.

## Limitations and Suggestions Future Research

Broader generalization of the results of this research requires the use of samples that extend beyond higher education. Measures of social interaction anxiety that focus on interaction with others who are perceived as significantly different, and distinguish between trait and state interaction anxiety, will improve specification of models, help identify situational influences, and produce better alignment of intervention frameworks and foci. Further specification of the self-efficacy measure that focuses on specific team-mate differences like ethnicity, gender, disability and professional background may help to produce more feature-oriented insight.

To conclude, this study confirms that diversity appreciation is positively associated with self-efficacy for teamwork with team-mates who are perceived as significantly different from oneself, and that social interaction anxiety partially mediates the relationship. The results suggest the need for education, training, coaching and other developmental activities that promote diversity appreciation and address social interaction anxiety in an integrated manner.

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