

Relational Schema in Social Anxiety: Role of Attachment Styles and Interpersonal Sensitivity

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Background: Despite evidence of an association between the influence of early significant relationships and later social information processing, there have been few efforts to empirically examine this proposition with respect to social anxiety. **Aims:** The present study examined attachment styles and interpersonal sensitivity in relation to social anxiety. **Method:** The responses of 30 community participants and 43 persons with a primary diagnosis of social anxiety disorder (SAD), on the Attachment Style Questionnaire- (ASQ), Interpersonal Sensitivity Measure (IPSM), Social Interaction Anxiety (SIAS) and Beck Depression Inventory-II (BDI-II) were analyzed. **Results:** Individuals with SAD were significantly more anxious and avoidant, reported greater interpersonal sensitivity than the community sample. Secure attachment style was associated with decreased social anxiety, while anxious and avoidant attachment styles were positively correlated with higher levels of social anxiety. In both these samples, anxious attachment style and a higher level of interpersonal sensitivity emerged as potential predictors of social anxiety. **Conclusions:** The findings are relevant in understanding the role of relational schemas in the psychopathology of social anxiety and have important clinical implications.

Keywords: relational schema, attachment style, interpersonal sensitivity, social anxiety.

Researchers in the field of social cognition acknowledge that social anxiety arises from activation of relational schemas. Relational schemas are defined as “cognitive structures representing regularities in patterns of interpersonal relatedness” (Baldwin & Main, 2001).

Attachment refers to a pattern of relational expectations, emotions and behaviours. Individual differences in attachment system functioning may be explained by differences in responses of significant others either rejection or acceptance to attachment needs. These are internalized as relational expectancies and guide subsequent social interactions (Bowlby, 1979). Relational expectancies include knowledge about affect regulation and coping effectively and are based on the kind of relational script held by an individual (Mikulincer & Shaver, 2006).

Although attachment theory was originally proposed to understand the emotional bond in the infant-caregiver relationship, it was later

extended to adult romantic relationships (Hazan & Shaver, 1987). Studies on adult attachment have used a tripartite typology of attachment namely, secure, avoidant and anxious-preoccupied styles which are considered almost equivalent to Ainsworth’s original classification of infant attachment (Ainsworth, Blehar, Waters, & Wall, 1978). Individuals with secure attachment consider themselves and significant others as worthy and capable of forming relationships characterized by intimacy and trust. Avoidant adults tend to deny their emotional requirements for attachment, perceive significant others as distrustful, and thus strive to maintain behavioural and emotional independence from others. Adults with anxious-preoccupied attachment often devalue their own abilities, worry about abandonment and rejection by significant others and are hypervigilant about cues for potential rejection. Overall, adult attachment reflects expectations about emotional availability of significant others during stressful circumstances (Mikulincer & Shaver, 2006).

Attachment styles may change as new information is incorporated regarding more secure relationship experiences. This understanding is contrary to the earlier conceptualization of attachment pattern as being stable and resistant to change, and has implications for psychological interventions.

Although relational schemas and concerns regarding relatedness to significant others are an important part of social anxiety, empirical work in this area has been scarce. Social anxiety disorder (SAD) is a common mental health condition that causes significant distress and is associated with negative affect, depression and disability. Preliminary work suggests that SAD is negatively associated with secure attachment and positively associated with avoidant and anxious attachment (Mickelson, Kessler, & Shaver, 1997). Social anxiety is seen as a function of beliefs about self and others in relationships that are contained in internal working models (Vertue, 2003). Lack of attachment security may result in fragile views of self and world and greater anxiety regarding possible rejection, leading to high interpersonal sensitivity (Eng, Heimberg, Hart, Schneier, & Liebowitz, 2001; Mikulincer & Shaver, 2006). SAD is characterized by an increased sensitivity to interpersonal interactions. However this aspect has not been adequately addressed in literature (Erozkan, 2011; Kumari, Sudhir, & Mariamma, 2012). Interpersonal sensitivity is the heightened sensitivity to feedback from others, along with vigilance with regard to others' reactions, perceived or actual criticism by others, feelings of inadequacy and non-assertive behaviours (Boyce & Parker, 1989; Boyce, Hickie, Parker, & Mitchell, 1993; Davidson, Zisook, Giller, & Helms, 1989). Studies on the interactions between anticipation of rejection and the individual's coping behaviours indicate that individuals with social anxiety experience several aspects of interpersonal rejection sensitivity (Levy, Ayduk & Downey 2001; Turk, Lerner, Heimberg, & Rapee, 2001). Despite these overlapping features, interpersonal sensitivity in social anxiety has received little research attention (Brown, Campbell, Lehman, Grisham, & Mancil, 2001; Harb, Heimberg, Fresco, Schneier, & Liebowitz, 2002; Kumari

et al., 2012). Individuals high on interpersonal sensitivity are likely to modify their behaviour in keeping with others' expectations so as to reduce risk of rejection. This is similar to what takes place within attachment models, wherein an individual modifies behavior according to the perception of availability of attachment figures. Both attachment style (Mickelson et al., 1997) and interpersonal sensitivity (Harb et al., 2002) have been related to negative affect and interpersonal difficulties (Erozkan, 2011).

Culture plays an important role in determining social expectancies and behaviors that guide interpersonal interactions. Cultural differences may explain variations in perception, appraisal and acceptance of outgoing versus socially reserved behavior across countries. For example, in India, shyness exhibited by women is considered to be a virtue, an accepted and expected nature of women (Sinha, 2011), thus making them more self-conscious in social situations. Also, given the collectivistic nature of the cultural scenario, there could be higher level of dependence on others, an anxiety to gain acceptance from people and also an emphasis on emotional restraint or self-control (Wei, Russell, Mallinckrodt, & Zakalik, 2004). Some studies indicate that there is a cultural difference in nature of dysfunctional beliefs such as need for approval (Kumari et al., 2012; Vidyanidhi & Sudhir, 2009).

Both attachment styles and interpersonal sensitivity have been positively associated with psychological distress and interpersonal difficulties (Eng et al., 2001). Despite the role of these relational schemas in contributing to difficulties in interpersonal relations and functioning, they have not been examined adequately.

Studies on social anxiety focus largely on cognitive processes maintaining anxiety (Clark & Wells, 1995). However, it is also important to examine interpersonal factors that contribute to SAD and in particular attachment anxiety.

There is an increasing emphasis on interpersonal interactions across societies. Persons with social anxiety experience significant distress in dealing with these everyday social interactions. However, in the absence of a

better understanding of interpersonal processes contributing to its maintenance, treatments for social anxiety may be limited in their effectiveness. Therefore, in the present study, we studied two relational schemas, attachment styles and interpersonal sensitivity in relation to social anxiety. We hypothesized that an insecure attachment styles would be associated with greater interpersonal sensitivity and an increased experience of social anxiety, while secure attachment styles would be associated with lower interpersonal sensitivity and social anxiety.

Method

Participants

The study included two sets of data from a non-clinical community sample (N=30; Mean age in years=29.06, SD=5.30) and a clinical sample (N=43; Mean age in years=28.58, SD=5.81). Participants in the clinical sample were recruited if they had a primary diagnosis of social anxiety disorder and participants with any other Axis I disorders, with the exception of depression, were excluded (SAD; Diagnostic and Statistical Manual of Mental Disorders, 4th ed., text rev.; DSM-IV-TR; American Psychiatric Association, 2000). The Mini-International Neuropsychiatric Interview-6.0 Plus (MINI-6.0 Plus; Sheehan et al., 1998) was administered to confirm diagnosis of SAD. With the exception of Anxious Avoidant Personality Disorder (AAPD), all other Axis II disorders were ruled out using the Structured Clinical Interview for DSM-IV Axis II-Personality Disorders (SCID-II; First, Gibbon, Spitzer, Williams, & Benjamin, 1997). Patients with AAPD were included as AAPD is one of the most common co-morbidities of SAD. Participants in the community sample were asked if they had ever sought any consultation or professional help for mental health concerns with in the past or currently. Individuals reporting history of any psychiatric consultation were excluded from the study.

Materials

Attachment Style Questionnaire. ASQ (Feeney, Noller, & Hanrahan, 1994) is a 40 item measure with 5 dimensions, namely, confidence in relationships, discomfort with closeness,

need for approval, and preoccupation with relationships and relationships as secondary. Items are rated on a 6 point Likert scale, (1= "totally disagree" to 6= "totally agree"). Factor analysis of the ASQ yields a three factor solution (Feeney et al., 1994). ASQ classifies individuals' attachment style into one of three categories-secure (measured by Confidence scale), anxious (combining scores on need for approval and preoccupation with relationship scales) and avoidant (combining scores on discomfort with closeness and relationships as secondary). Kapanee (2009) reported internal coefficients for the 3 scales, for Confidence, Avoidant and Anxious attachment styles as $\alpha = 0.64, 0.74, 0.80$, respectively in an Indian sample.

Interpersonal Sensitivity Measure. The IPSM (Boyce & Parker, 1989) is a 36 item self report measure with 5 subscales namely interpersonal awareness, need for approval, separation anxiety, timidity and fragile inner self. Items are rated on a 4 point scale (1 = "Very unlike you" to 4= "Very like you"). It has a 4 week test-retest reliability of 0.85 for the total score and coefficients ranging from 0.55 to 0.76 for subscales (Boyce & Parker, 1989). The internal consistency of the IPSM total score in the Indian setting is reported to be adequate ($r = 0.67$, Vidyandhi & Sudhir, 2009).

Social Interaction Anxiety Scale. The SIAS (Mattick & Clarke, 1989) is a 19 item measure which assesses one's typical cognitive, affective or behavioral reaction to a variety of situations requiring social interactions in dyads or groups. Items are rated from 0 (not at all characteristic or true of me) to 4 (extremely characteristic or true of me). Test retest reliability and internal consistency are reported to be 0.92 and 0.93 respectively (Mattick & Clarke, 1989). In the present study, the internal consistency for SIAS was found to be adequate ($\alpha = 0.91$ and 0.91) in the community and clinical samples respectively.

Beck Depression Inventory. (BDI-II; Beck, Steer, & Brown, 1996) is a 21 item self report instrument that is widely used both as a screening instrument to detect depression and rate severity. It has good psychometric properties (Dozois & Covin, 2004).

Procedure

The community sample (N=30), fulfilling study criteria was recruited from college and workplace settings based on quota sampling. The clinical sample (N=43) comprised of consecutive patients with SAD presenting to the outpatient services of National Institute of Mental Health and Neurosciences. In order to maintain homogeneity between the two groups with respect to gender, only male participants were considered for the comparison between groups. Participants in both samples were administered measures of attachment style, interpersonal sensitivity, social anxiety and depression. All measures were administered individually and in English.

The study was reviewed and approved by the Institute Ethics Committee (IEC) NIMHANS. All participants provided written informed consent for participation and did not receive any monetary benefits for their participation.

Statistical Analysis

Data was coded for computer analysis using Statistical Package for Social Sciences (SPSS, Version 15.0). Normality of distribution of scores was confirmed using the Kolmogorov-Smirnov (K-S) test. Both groups were compared on measures using Chi square test, Fisher's

exact test and Independent Sample Student's t-test. The associations between relational schemas and affect were examined using Pearson's correlation coefficient. Stepwise linear regression analysis was computed to identify predictors of social anxiety. Attachment and interpersonal sensitivity were entered as independent variables. Two tailed tests of significance with level of significance of 0.05 was set for the 't' test.

Results

The overall sample had 58.9% unmarried participants, and 2/3rd of the clinical sample were unmarried (65.1%), while half of the community sample (50%) were unmarried.

Both groups were comparable with respect to all demographic characteristics (Table 1) except on, marital status and family history of mental illness. The clinical sample had slightly higher unmarried participants, with slightly higher proportion of them reporting family history of mental illness (56%) than the community sample (21.7%).

The average age at onset of SAD (Mean age at onset= 15.86, SD =6.22) with a long illness duration (Mean= 12.62, SD=7.03). Majority (78%) had generalized sub-type of SAD. About 30% of them fulfilled criteria for anxious avoidant personality disorder (AAPD).

Table 1. Demographic Characteristics of the community and clinical samples

Variables	Community sample (n=30)	Clinical sample (n=43)	t (71) / χ^2
Age Mean (SD)	29.06 (5.56)	28.58 (5.74)	0.364
n (%)			
Marital Status			
Never married	15 (50%)	28(66)	0.03 ^b
Married		15(32)	
Separated/Divorced		1 (2)	
Education			
High School/diploma	3 (10%)	10 (23.3%)	0.168 ^b
Graduate	6 (20%)	27.9 (12%)	
Post graduate	21(70%)	21 (48.8%)	
Occupation			
Student	8 (26.7)	9(20.9%)	1.46
Not-employed	1(13.3)	8(18.6%)	
Employed	21 (70.7%)	26 (60.5%)	

Notes: b- Fisher's Exact test significance; ** p < .01; *** p < .001 (two tailed)

Table 2. Comparison of samples on measures of attachment, interpersonal sensitivity and social anxiety

Measures	Community sample (n=30)		Clinical sample (n=43)		t (71)
	Mean	SD	Mean	SD	
Attachment					
Confidence	35.10	5.79	25.09	5.95	4.290**
Discomfort with closeness	34.73	6.40	41.72	7.46	-4.166**
Relationship as secondary	19.77	6.65	27.07	7.37	-4.333**
Need for approval	21.13	7.57	29.95	6.93	-5.14**
Preoccupation with relationship	26.03	7.51	35.47	7.16	-5.42**
Secure	35.10	5.79	29.09	5.95	4.290**
Anxious	47.17	13.94	65.42	12.94	-5.74**
Avoidant	54.50	10.87	68.79	11.98	-5.20**
Interpersonal sensitivity					
Interpersonal Awareness	17.27	3.29	23.23	4.47	-6.22**
Need for approval	23.13	2.92	25.35	3.24	-2.99**
Separation anxiety	18.00	2.91	22.09	5.15	-3.93**
Timidity	20.30	4.18	23.51	4.21	-3.21**
Fragile inner self	9.70	2.23	13.84	3.19	-6.12**
Total IPSM	88.40	11.02	108.02	15.63	-5.91**
Social Anxiety					
Total SIAS	24.43	11.76	49.65	15.58	-7.64**
Depression					
Total BDI-II	11.17	2.93	23.77	11.94	-4.53**

SIAS= Social Interaction Anxiety Scale, BDI- The Beck's Depression Inventory, Note: * $p < .05$; ** $p < .01$; $p < .001$ (two tailed)

Comparison between the community and clinical samples

Participants in the clinical sample (Table 2) were significantly less confident in their interpersonal relationships ($p < .001$), experienced greater discomfort with closeness ($p < 0.001$) and were more likely to consider relationships as secondary ($p < 0.001$) in comparison to community participants. They also expressed a greater need for approval ($p < .001$) and were more preoccupied with relationships ($p < 0.001$). The clinical sample also reported significantly greater anxiety ($p < 0.001$) and avoidant attachment styles ($p < 0.001$) and were less secure ($p < .001$) in their attachment compared to individuals from the community.

Participants with SAD also reported significantly higher interpersonal awareness (p

< 0.001), separation anxiety ($p < 0.001$), timidity ($p < 0.002$) and a fragile inner self ($p < 0.001$) and need for approval ($p < 0.01$). Their total scores on the IPSM was higher as compared to community participants ($p < 0.001$).

Community participants also reported experiencing social anxiety, however, as expected, participants in the clinical sample had significantly higher levels of both social anxiety (Mean= 49.65, SD= 15.14) and depression (Mean= 23.77, SD= 11.94) (Table 2).

Correlations among attachment style, interpersonal sensitivity and social anxiety

Correlations among attachment styles, interpersonal sensitivity and social anxiety were examined in both the samples (Table 3 and 4).

In the clinical sample (N=43), a secure attachment style was negatively correlated with both separation anxiety and fragile inner self on the IPSM. While in the community sample (N=30), there were no significant correlations between secure attachment style and interpersonal sensitivity either on the total score or any of the subscales. An avoidant attachment style was positively correlated with separation anxiety ($p < 0.01$) and fragile inner self ($p < 0.01$) in persons with SAD, but not with other subscales of the IPSM or with the total score of IPSM. These results were similar with respect to community participants, however in the community sample, an avoidant attachment style was significantly correlated with total score on IPSM ($p < 0.01$).

An anxious attachment style was positively correlated with total score on IPSM ($p < 0.001$), interpersonal awareness ($p < 0.001$), separation anxiety ($p < 0.001$), need for approval ($p < 0.001$), and fragile inner self ($p < 0.004$), but not with timidity, in persons with SAD. The findings with respect to the avoidant attachment style was similar to that found in the community sample, with respect to correlations between anxious attachment style and interpersonal awareness ($p < 0.001$) separation anxiety ($p < 0.0015$) and fragile inner self ($p < .004$) and the total score on IPSM. However in the community sample an anxious attachment style was not associated with either need for approval or timidity.

With respect to correlations between attachment styles and social anxiety, a secure attachment style ($p < 0.01$) was negatively correlated with social anxiety in both samples and was greater in the clinical sample ($p < 0.001$). There was a positive correlation between anxious ($p < 0.001$) and avoidant ($p < 0.001$) attachment styles and social anxiety in the clinical sample, but not in the community sample. Interpersonal awareness ($p < 0.05$), separation anxiety ($p < 0.05$), fragile inner self ($p < 0.01$) and total score on IPSM ($p < 0.01$) were positively correlated to social anxiety (see Table 4) in the clinical sample.

In the community sample, only interpersonal awareness, separation anxiety and total scores on IPSM were associated positively with self-reported social anxiety, while there were no significant correlations between social anxiety and timidity, need for approval or fragile inner self in the community sample.

Predictors of social anxiety

Stepwise linear regression analysis was carried out to assess the relative contributions of attachment styles and interpersonal sensitivity to the experience of social anxiety.

In both samples, an anxious attachment style emerged as a significant predictor of social anxiety. In the clinical sample, an anxious attachment style and confidence accounted for 40% of the variance in social anxiety (β -

Table 3. Correlations between attachment and interpersonal sensitivity

	Interpersonal Awareness	Need for approval	Separation Anxiety	Timidity	Fragile Inner self	Total IPSM
Community Sample (n= 30)						
Secure	0.037	0.201	-0.225	0.026	0.278	-0.042
Anxious	0.674**	0.191	0.637**	0.331	0.505*	0.648**
Avoidant	0.359	-0.087	0.369*	0.342	0.761**	0.465**
Clinical Sample (n= 43)						
Secure	-0.290	0.074	-0.359*	-0.021	-0.329*	-0.259
Anxious	.614**	0.481**	0.727**	0.272	0.676**	0.726**
Avoidant	0.202	-0.022	0.387*	-0.009	0.363*	0.252

IPSM= Interpersonal Sensitivity Measure, * $p < .05$; ** $p < .01$ (two tailed)

Table 5. Predictors of social anxiety (clinical sample)

Predictor Variable (s)	R	R ²	Adjusted R ²	F value (df=43)	β	p-value
Anxious Attachment style and confidence in relationships	0.64	0.40	0.37	13.54	0.29	0.01

Table 6. Predictors of social anxiety (community sample)

Predictor Variables	R	R ²	Adjusted R ²	F value (df=29)	β	p-value
Anxious Attachment style, need for approval and timidity	0.79	0.62	0.76	14.14	0.55	0.01

0.29; R²=0.40; F=13.54;df=42, p<0.01). In the community sample, anxious attachment style, need for approval and timidity together predicted more than 60 % of the variance in social anxiety (β=0.55; R² =0.62, F=14.14, df=29, p<0.01).

Table 4. Correlations between attachment, interpersonal sensitivity and social anxiety

	Community sample (n=30)	Clinical sample (n=43)
Social anxiety (SIAS)		
Attachment		
Secure	-0.445*	-0.576**
Anxious	0.574**	0.494**
Avoidant	0.585**	0.423**
Interpersonal Sensitivity		
Interpersonal Awareness	0.447*	0.408**
Need for approval	0.310	0.143
Separation Anxiety	0.441*	0.432**
Timidity	0.357	0.029
Fragile Inner self	0.543**	0.429**
Total IPSM	0.413*	0.383*

IPSM= Interpersonal Sensitivity Measure, * p< .05;** p< .01(two tailed test)

Discussion

The present study examined attachment styles and interpersonal sensitivity in relation to

social anxiety in a sample of patients with social anxiety and a community sample.

Difficulties in forming close interpersonal bonds are characteristic of individuals with SAD (Turk et al., 2001). Early experiences with significant others, within the family play an important role in developing mental scripts or schema in the interpersonal context and in turn guide social interactions across life.

In the present study the significantly larger number of unmarried males in the clinical sample, indicates a treatment seeking pattern, in which there is a greater preponderance of single males who may seek help when social anxiety interferes with occupational and other social roles required of them. This finding is consistent with both western and Indian literature (Kumari et al., 2012; Magee, Eaton, Wittchen, McGonagle & Kessler, 1996). While participants in the clinical sample reported greater social anxiety and depression, the presence of social anxiety symptoms in the community suggests that social anxiety exists along a continuum from pathological states to sub-clinical social anxiety (Furmark, Tillfors, Everz, Marteinsdottir, Gefvert, & Fredrikson, 1999). It also indicates a need to address issues of social anxiety in the community settings, especially amongst young adults.

Our findings indicate that individuals with SAD were reported more anxious and avoidant attachment styles as compared to the community participants, who reported being more secure. Thus in experiencing attachment anxiety, socially

anxious individuals experience lower levels of self-worthiness, greater need for others' acceptance and approval and are more likely to reach out to others to fulfil their own dependency needs. They also have greater difficulty in being able to trust and depend on others and in being comfortable with intimacy more due to the need to protect self against interpersonal rejection (Eng et al., 2001). Studies examining attachment styles and interpersonal functioning suggest that an avoidant pattern of attachment is associated with avoidant interpersonal style, in which people distance themselves from intimacy due to fear of interpersonal rejection, typical of socially anxious individuals (Darcy, Davila, & Beck, 2005). The very nature of social anxiety is also one of sensitivity and insecurity and therefore these findings provide support to the description of relational anxieties experienced by people with SAD.

Heightened interpersonal sensitivity is likely to influence an individual's approach to social interactions. Individuals with SAD also reported greater interpersonal awareness and were vigilant in interpersonal interactions, greater separation anxiety with respect to rejection from relationships as compared to community participants and were more likely to describe themselves as being non-assertive and held negative views of self (fragile inner self). Our findings are consistent with literature on interpersonal sensitivity in this clinical population (Kumari et al., 2012; Vidyanidhi & Sudhir, 2009). The absence of a significant difference between the groups on the need for approval highlights the need to consider cultural variations in interpersonal sensitivity (Mathew, Sudhir, & Mariamma, 2014; Sahin & Sahin, 1992). In a collectivistic culture, individuals wish to make others happy and not displease others, and engage in behaviours that would ensure acceptance rather than rejection. Therefore, the presence of a higher need for approval need not be regarded as a limitation in one's interpersonal functioning. Interpersonal schemas are thus likely to be shaped and determined by cultural influences through interactions with family, peer and the larger community.

There is a paucity of research exploring links between attachment styles and interpersonal

sensitivity (Eng et al., 2001). In this study, secure attachment was associated with lower interpersonal sensitivity and a greater need for approval. Individuals with secure attachment style consider themselves as self-worthy, likeable and perceive significant others as being available. They are less worried about others' critical responses or separation from significant others and perceive themselves as being worthy of others' care. A positive association between secure attachment and need for approval emphasizes the cultural significance of this construct.

Both anxious and avoidant attachment styles were positively associated with higher levels of interpersonal sensitivity. Although heightened interpersonal sensitivity is common to both anxious and avoidant attachment styles, it appears that the resulting distress is managed differently across different attachment styles. This may explain the differences in their behavioural and emotional expression. Anxious attachment style is characterized by excessive dependence on others as source of emotional comfort, while the avoidant attachment is descriptive of individuals who distance themselves and avoid intimacy with others due to fear of rejection (Bartholomew & Horowitz, 1991). Distress regulation strategies are likely to play an important role as potential mediators in the association between attachment styles and interpersonal sensitivity. Contrary to the common perception of avoidant attachment as being characterized by behavioural independence, emotional distance from others and a self-reliant attitude (Mikulincer & Shaver, 2003), the findings of the present study suggest the presence of separation anxiety even in individuals with avoidant attachment style. This may explain the overt manifestation of decreased dependence on others and attempting to handle distress alone.

Although in clinical experience persons with social anxiety are known to express difficulties in relating to others, there is a paucity of empirical research exploring the association between attachment, interpersonal sensitivity and SAD. An important finding of the present study is the contribution of attachment styles and interpersonal sensitivity in predicting social

anxiety. Both anxious attachment style and heightened interpersonal sensitivity predicted greater experience of social anxiety, also suggesting that both may reflect a similar relational anxiety. However, as the present study has used a cross-sectional design, there is a need to further understand this relationship using prospective designs.

An anxious attachment style, characterized by less willingness to trust and depend on others and greater anxiety about potential rejection is typical of patients with social anxiety (Erozkan, 2011). Such a preoccupation could result in unsuccessful attempts to socialize, which may evoke negative reactions from others, leading to a confirmation of one's beliefs about being socially inadequate and others as rejecting (Vertue, 2003). Avoidance is seen as a protective strategy against exposure to such rejection experiences. However, avoidance deprives one of opportunities to experience social success and challenge negative beliefs, leading a vicious cycle of reinforcing dysfunctional cognitions (Clark & Wells, 1995; Hofmann, 2007). In this manner, anxious attachment is likely to provide a pathway to social anxiety.

Heightened interpersonal awareness, separation anxiety and fragile inner self (all aspects of interpersonal sensitivity) emerged as significant predictors of social anxiety. This is keeping with the core features of interpersonal concerns in SAD. Interpersonal sensitivity has been regarded as an interpersonal vulnerability to both depression and anxiety, potentially through its high correlation with neuroticism (Evans et al., 2006; Harb et al., 2002). Our findings are consistent with recent research in this area which highlights interpersonal sensitivity as a vulnerability factor to social anxiety (Kumari et al., 2012).

Limitations

The study was cross-sectional in nature and therefore the etiological significance of attachment and interpersonal sensitivity in contributing to social anxiety as well as its stability could not be examined. There was an over representation of educated, urban participants, from a middle socio-economic background. Thus findings may be limited in its generalizability

given the diversity of the population in the Indian subcontinent. Community participants were asked a single question regarding past mental health problems and consultation in order to screen them. The inclusion of a screening measure for the community sample would have made the study more robust.

Another potential limitation is the likely overlap between social anxiety and attachment anxiety. Given that persons with social anxiety experience significant difficulties maintaining interpersonal relationships, there may have been a significant overlap between these two constructs. Similar findings have been reported by other researchers (Eng et al., 2001). The examination of these variables in both clinical and community samples offers a better understanding of the variables.

The findings of this study support the views put forth by both cognitive and interpersonal models of social anxiety, and suggest that in addition to cognitive factors, interpersonal vulnerabilities must also be considered in understanding social anxiety. Cultural differences with respect to need for approval construct also cautions us against using generalizations regarding social cognitions. Assessment of attachment orientations early in therapy may help in identifying those who are particularly at greater risk for poor treatment adherence and difficult therapeutic alliance that are likely to influence response to therapy. Attachment styles are believed to develop as a result of early parent-child interactions and later with other significant members in one's life. Targeting dysfunctional attachment models of self and others in therapy would be therefore be essential.

While the efficacy of cognitive behavior therapy in social anxiety is well established, it would be important to address interpersonal factors such as attachment and interpersonal sensitivity that could possible maintain anxiety despite methods such as exposure (Dykas & Cassidy, 2011). In conclusion, attachment and interpersonal sensitivity play an important role in the experience of social anxiety and both are impacted by the overall cultural context.

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