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▲ Home

◀ Contents



Volitional Strategies and Social Anxiety among College Students

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Abstract

This study administered the Academic Volitional Strategy Inventory to investigate volitional strategies amongst socially anxious college students. Volitional strategies regulate motivation and emotion to aid in the achievement of academic tasks. It was important to examine this phenomenon based upon the premise that socially anxious students have difficulty achieving educational goals. Analysis revealed that socially anxious students are more likely to employ negative-based incentives rather than a combination of volitional strategies such as self-efficacy or stress-reducing actions. These findings have important implications for helping socially anxious students achieve their academic potential. Implications of these findings are discussed.

Key words: social phobia, social anxiety, volitional strategies, college students

Social phobia (also known as social anxiety disorder) is an anxiety disorder in which its core cognitive component involves, 'fear of being scrutinised or assessed in a negative way by others' (Westenberg, 1999, p.93). Social phobia can also include fear of being observed writing, eating, or using a restroom, test anxiety, speaking in public, or socializing (Heimberg et al. 1990). Social phobia includes distressing symptoms such as palpitations, trembling, tense muscles, sinking feeling, dry throat, sensation of hot and cold, blushing, sweating, stammering and twitching. The last four symptoms are more specific for social phobia than for any other anxiety disorder (Amies, Gelder, and Shaw, 1983; Solyom, Ledwidge and Solyom 1986). Those who are symptomatic of social phobia are known to be socially anxious (social anxiety). Both social phobia and social anxiety have been used interchangeably in many papers, but social anxiety 'includes a collation of symptoms which unlike shyness can vary in severity through one's life: these symptoms are only elicited in certain social situations (Leary, 1983, p. 14; cited in Shepherd & Edelman, 2005, p. 2). Therefore, the term social anxiety will be used to describe social fears. Consequently, both social anxiety and social phobia can affect an individual's relationships, occupational success, and educational potential (Heimberg, Hope, Dodge and Becker 1990).

Prevalence studies of social phobia have varied due to cultural differences and the use of diverse psychometric scales to measure social phobia. The lifetime prevalence rates in the general population can vary between 2.4% and 16% (Schneier, Johnson, Hornig,

Liebowitz and Weissman, 1992; Wacker, Mullejans, Klein & Battegay, 1992). With this in mind, there is a higher rate of women suffering from social phobia in the general population compared to men. Yet, men are more likely to be identified with social phobia within clinical cohorts. It is speculated that this gender difference may be due to the impact of social phobia on occupational opportunities for men (Judd, 1992; Solyom et al. 1986).

Social phobia is also prevalent within the academic community. In two American studies, Strahan (2003) reports 22% of undergraduates suffer from social phobia, and Turner (1989) reports 19% of undergraduate students were identified with social phobia. This is not surprising since social phobia usually begins in late adolescence and seems to intertwine with developmental issues (Nichols, 1974). In addition, late adolescence is the time when many young people leave familiar settings to live at college. They will be exposed to social and performance challenges within the college milieu such as meeting unfamiliar people, writing in front of others, engaging in group discussions, dating, and test anxiety. Although many young people view this transition as exciting, socially anxious students are likely to view this change as daunting. With this in mind, this paper aims to examine social anxiety along a continuum in relation to learning regulation. A volitional model will be employed to examine both emotional and motivational self-regulation specifically with students suffering from social anxiety.

Volitional model of self-regulation

The volitional model explains what the struggling learner does. Motivational and emotional regulatory processes help the learner persevere with academic goals (Pekrun, Goetz, Wolfram, Perry, 2002; McCann & Gracia, 1999; Pintrich, 1999, p.335). Dewitte and Lens (1999) posit that volitional strategies are not necessary for those who are exceptionally intelligent, psychologically sound, or have superb study habits. They argue that applying volitional strategies may backfire for those attempting easy tasks, but suggest that those with emotional problems (e.g. social anxiety) may particularly benefit from employing volitional strategies. In contrast, Corno (2004, p. 1670) argues that all students, including 'exceptional students', employ volitional strategies at different points in their learning.

Volitional processes within the model employed include three emotional and motivational components and these are: self-efficacy, negative-based incentives, and stress reducing strategies (McCann and Gracia, 1999). In this context, self-efficacy is one's belief about the ability to achieve academic goals (Pekrun, 2000; Lent, Brown and Larkin 1986; Bandura, 1989). For example, self-efficacy statements may include, 'I think about my strengths and the resources I can draw on to help me with difficult assignments or test information' (McCann and Turner, 2004). Consequently, low self-efficacy can create a vicious cycle of self-defeating behaviour in learning resulting in task avoidance (Bandura, 1989; Schunk, 1991; Bandura, Reese and Adams 1982;

Schunk and Zimmerman, 1994).

Negative-based incentives are thinking about negative consequences to increase effort to persevere, and these incentives have been known to be linked with negative affect (Cox and Klinger, 1988). Negative-based incentives include statements such as, 'I think about how disappointed others (family/friends) will be if I do poorly' (McCann and Turner, 2004). Consequently, socially anxious individuals are more likely to lack positive self-reinforcement and positive thoughts which may influence volitional processes (Bruch, Mattia, Heimberg and Holt 1993).

Stress-reduction strategies involve stress-management techniques which may include listening to music, exercising, taking deep breaths, or seeking support (e.g., peers or tutors). A seeking support statement may involve, 'If I am having difficulty, I call a friend from the class and discuss the assignment/material with them' (McCann and Turner, 2004). Seeking support is central to self-regulatory processes of learning (Schunk and Zimmerman, 1994). In particular, 'student participation' and 'peer relationships' contribute significantly to academic success (Clearly and Zimmerman, 2004, p. 547). It would, however, be unlikely that socially anxious students would seek support from unfamiliar people such as a tutor or a study group. Socially anxious students usually fear rejection, face-to-face interaction particularly with authority figures; therefore, they may avoid this strategy (Elting and Hope, 1995).

Based upon the two different views on the employment of volitional strategies (Dewitte and Lens vs. Corno), there may be differences in the use of volitional strategies between those with social anxiety compared to those who do not have elevated symptoms of social anxiety. Therefore, it is hypothesized that those with high scores on the social phobia scale will have higher scores on the negative based incentives subscale compared to those who do not have higher scores on the social phobia scale. The second hypothesis states that those with low social phobia scores will score higher on the self-efficacy and stress-reducing strategies subscales compared to those who score higher on the social phobia scale. The third hypothesis states that older students are more likely to utilize stress-reducing and self-efficacy strategies based upon the premise that older students learn how to cope as they progress through college (Dafna and Heiman, 2005).

Method

Sample

One hundred and twenty-seven participants completed the questionnaire packet. There were 18 males and 109 females. Eighty percent were Caucasian and 7% were Black, 4% Asian, and 8% were 'other' (e.g., Greek, Chinese). Ninety-two percent were psychology majors and 8% were studying psychology with another major. The

participants' ages ranged between 18 and 59 years of age with a mean age of 23. Overall, most of the participants' ages ranged between 18 and 21 years of age.

Questionnaires

The Brief Social Phobia Scale (BSPS) (Davidson, Potts, Richichi, Ford, Ranga Rama Krishnan, Smith and Wilson, 1991).

The BSPS contains three subscales assessing for Fear, Avoidance, and Physiological (autonomic) symptoms of social phobia. There are seven items each on the Fear and Avoidance subscales and 4 items on the Physiological subscale (also referred as the Autonomic Subscale). Responses were scored based upon a likert scale ranging between 0 and 4 (0=none, 1=mild, 2= moderate, 3=severe, 4=extreme). The Brief Social Phobia Scale has high reliabilities with Liebowitz Social Anxiety Scale, the Fear of Negative Evaluation Scale, and the Hamilton Anxiety Scale (for a full review see Davidson, Miner, De Veugh-Geiss, Tupler, Colket and Potts, 1997). The pre-treatment scores can range from 19 to 56 (post treatment scores were not reported in Davidson's article).

Davidson and colleagues (1997) conducted factor analysis without rotation and six factors resulted with eigenvalues above 1.0. However, only three factors were retained describing the subscales as fear, avoidance, and autonomic responses. Davidson and colleagues (1991, p. 50) reported a coefficient of reliability of .98 with the Brief Social Phobia Scale indicating good test retest reliability'.

The Academic Volitional Strategy Inventory (AVSI) (McCann and Gracia, 1999).

The AVSI is a 30 item scale assessing self-regulatory behaviour. This scale is a three-factor scale measuring self-efficacy, negative-based incentives, and stress-reducing strategies. A yes or no response is elicited followed by a response on a likert scale if the response is yes. The likert scale ranges between 0 and 5 describing 'how often do you do this?' from 'I almost never do this' to 'I almost always do this'. The Alpha scores for the three subscales yielded .82 for self-efficacy, .73 for negative-based incentives, and .87 for stress reducing strategies. The total scale score yielded .78. These findings support the scale's reliability.

Demographic variables:

Questionnaires on demography included questions about age, gender, marital status, one's major and ethnic background, and were asked on a separate sheet.

Procedure

After ethical approval from the college, participants were recruited from psychology classes from a college in London.

Volunteers were given a consent form indicating what was involved in this study. They were informed that their questionnaire will be coded with a number to ensure anonymity and they could terminate at any time. The participants were also given a debrief form including helpline numbers if participants experienced anxiety or related distress during participation.

Results

Social Phobia Scale

The range of scores reported by Davidson and colleagues (1991) were compared to this study (Table 1). The scores in Davidson's study were based upon pre-treatment scores of individuals suffering from social phobia in a clinical cohort; therefore, the scores in the nonclinical sample in this study seem to be quite high. Similar to Davidson's findings, the findings here offer a good 'theoretical range' (Davidson et al., 1991, p. 49). Although there was no cut-off point for 'caseness', there were 52% (N=60) who scored over the mean on the total score. In this study, the students' total score ranged between 7 and 54 with a mean of 26. There were 8 of the 18 men who scored above the mean of the total scores and 52 of the 109 women who scored above the mean score of the BSPS scale scores. Although, scoring above the mean is not indicative of social phobia, these scores above the mean group scores suggest symptomatology of social phobia (Table 2) (insert table 1 & 2).

Table 1

Comparison of the range of scores in the BSPS with Davidson's* clinical study with this non-clinical cohort

	Davidson's cohort				This study's data			
	Range	Mean	Median	SD	Range	Mean	Median	SD
Total	19-56	40.8	45	10.7	7-54	25.76	24	10.36
Fear	9-23	16.2	18	4.2	2-22	11.27	11.0	4.5
Avoidance	3-21	15.2	19	5.8	2-22	11.61	12.0	4.6
Autonomic	4-14	9	9	3	0-10	2.89	2.0	2.9

Table 2

Descriptives

Scale	Mean	Standard Deviation	N
Self-Efficacy	9.25	2.47	127
Stress-Reducing Strategies	3.55	1.98	127
Negative-based Incentives	3.34	1.46	127
Fear Subscale	11.27	4.53	127
Avoid Subscale	11.61	4.6	127

Auto Subscale	2.89	2.93	127
Total Scores of the Brief Social Phobia Scale	25.49	10.46	127
Age	23.71	7.89	127

Bivariate Correlations

Bivariate correlations were carried out to examine the relationships between the variables and to test the construct validity of the scales. The strong correlations between the social phobia subscales (fear, auto, avoid) confirm the construct validity of the subscales. The strong correlations between the subscales of the volitional strategies also confirm the construct validity of the subscales.

There were significant correlations between the fear subscale, avoidance subscale, and total social phobia scores with the negative based incentive subscale scores. There was a negative association between social fears and stress-reducing strategies, but this link was not significant. In addition, there was a negative association between social fears and self efficacy strategies, but this link was also not significant.

Subsamples of the demographic data were too small to examine differences except for age and volitional strategies. There were significant relationships between age and the self-efficacy and stress-reducing strategies (See Table 3).

Key to Bivariate Correlation Table

Self – Self-Efficacy Subscale

Stress – Stress-Reducing Strategies

Neg – Negative Incentives

Fear – Fear Subscale of the Brief Social Phobia Scale

Avoid – Avoidance Subscale of the Brief Social Phobia Scale

Auto – Autonomic/Physiological Response Subscale of the BSPS Scale

BSPS – Total Scores of the Brief Social Phobia Scale

Age – Age of the participants

Table 3
Bivariate Correlations

	Self	Stress	Neg	Fear	Avoid	Auto	TBSPS
Self	** .608						
Neg	** .311	n.s.					
Fear	n.s.	n.s.	** .247				
Avoid	n.s.	n.s.	* .210	* .808			
Auto	n.s.	n.s.	n.s.	** .498	** .376		

TBSPS	n.s.	n.s.	*2.47	** .937	** .904	** .668	
Age	** .277	** .276	n.s.	n.s.	n.s.	n.s.	n.s.

* Correlations significant at the $p < 0.05$

** Correlations significant at the $p < 0.01$

Discussion

The main finding, a significant relationship between social fears and negative-based incentives, supports the first hypothesis. Students who suffer from social anxiety are more likely to imagine negative consequences as a way to persevere with learning tasks. Although most students utilize negative-based incentives (McCann and Garcia, 1999), the significant correlation between this strategy and social phobia deserves further attention. These results may support the supposition that those who neglect other aspects of self-regulatory processes may deplete other sources of energy. Consequently, depleted energy can place the student vulnerable to ruminate, become depressed, or both (Baumeister, Bratslavsky, Muraven and Tice 1998; Dewitte and Lens, 1999).

Although there was a negative association between social fears and stress-reducing strategies, this link was not significant. Therefore, these results do not fully support the hypothesis that those with social fears are less likely to utilize these volitional strategies. However, the lack of a positive significant association suggests that those with social fears do not utilize stress-reducing strategies as much as negative-based incentives.

Although there was a negative association between social fears and self-efficacy strategies, this link was also not significant. However, this negative association may suggest that self-efficacy strategies are not fully employed by students with social fears.

The significant positive associations between age and volitional strategies (e.g., stress-reducing strategies and self-efficacy strategies), suggest that students are likely to learn stress management techniques. This supports Dafna and Heiman (2005) findings that older students learn coping techniques. These findings also support Corno's (2004) supposition that volitional strategies are used more frequently amongst most college students.

Limitations of the study

It must be noted that this cohort may not be representative of all socially anxious students in higher education as some may drop out, do not enrol in higher education, are not psychology majors, or may not want to participate in studies (particularly on social anxiety). One could also speculate that a majority of socially anxious students favour distance learning as a way to avoid face-to-face interaction. Further studies utilizing other methodological approaches and larger sample population are needed to explore fully the relationship between

volitional strategies and socially anxious students in higher education. Subsamples of the demographic data were too small to examine differences except for age. Therefore, a larger sample would be needed to further explore this variable as Hackett and others (1992, p. 536) reported a, 'statistically significant ethnic - gender interaction' in relation to volition.

The two scales employed in this study deserve some discussion. Although the brief social phobia scale was initially developed as an adjunct diagnostic tool for the clinical domain, it is worthwhile to note that a widely used scale for alcohol screening, the CAGE questionnaire, was also originally developed for clinical purposes. Nonetheless, the CAGE scale has been adopted and administered to nonclinical populations worldwide (Ewing, 1984; Granville-Chapman, Yu and White, 2001; Jhingan, Shyangwa, Sharma, Prasad, and Khandelwal, 2003; De-Lima Dunn, Novo, Tomasi and Reisser 2003). More research, however, is warranted to assess further the scale's validity in a larger nonclinical sample.

Surprisingly, the AVSI lacked questions pertaining to Internet use as a possible source of social support. This is unexpected considering that the Internet is a widely utilized medium for students for both social and academic reasons (Bonebrake, 2002; Scealy, Phillips and Stevenson 2002; Engelberg and Sjoberg, 2004; Erwin et al. 2004). In particular, cyberspace could be a way for socially anxious students to receive support and adopt stress-reducing strategies, particularly peer and tutor support (Davis, Flett and Besser, 2002).

Conclusion

The main finding of this study demonstrates a link between socially anxious college students and the utilization of negative-based incentives to regulate learning. In this regard, employing one volitional strategy too often may drain valuable energy for socially anxious students to persevere and achieve their academic potential. Employing other measures in addition to volitional strategies may provide more insight between volitional strategies and learning amongst socially anxious students in higher education.

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◀ Contents

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