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## **ANXIETY AND DECISION-MAKING STYLES OF COLLEGE STUDENTS**

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### *Abstract*

*The present study was conducted to find out the effect of anxiety on decision-making styles among college students. Two hundred students were randomly selected from various departments of different colleges in Coimbatore, between the age group of 20 to 24 years. The Decision-Making Questionnaire by Mann (1982) and Sinha's Anxiety Scale (1968) were used. Findings revealed that if the students become more anxious they tend to adopt vigilant decision-making style; female students were higher in defensive avoidance and rationalization than their male counterparts.*

### **Introduction**

Anxiety is "an unpleasant emotional state characterized by vague fears, physiological arousal and bodily symptoms such as rapid heartbeat and perspiration" (Baron, Byrne and Kantowitz, 1981).

According to Rana (2000) anxiety is defined as an 'emotional state which is accompanied by a number of unpleasant physical sensations and which generally occurs in anticipation of a painful or difficult situation'. Based on the

level of conflict, Janis and Mann (1977) described five behavior patterns that individuals use to cope with stressful decisional situations, viz. un-conflicted adherence, un-conflicted change, defensive avoidance, hyper vigilance and vigilance. Anxious individuals are fearful (Costa and McCrae, 1992), broadly scan their environment, frame neutral information as threatening (MacCleod and Cohen, 1993), focus on the greatest threats they face (Broadbent and Broadbent, 1988; Eysenck, 1992), strive to

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avoid failure (Elliot and McGregor, 1999), and attempt to achieve security (Raghunathan and Pham, 1999).

Additionally, anxious individuals tend to be publicly self-conscious (Beck and Clark, 1988) and consequently are more sensitive to social cues. These attributes are likely to lead to risk avoidance in a non-competitive situation.

Research suggested that large and stable individual differences in the tendency to seek versus avoid risky choices (Levin and Hart, 2003), wherein risk-taking and related decision-making processes reflect underlying dispositional qualities that vary across individuals. Evidence also suggested that decision-making can be profoundly shaped by emotional experiences (Loewenstein, Weber, Hsee and Welch, 2001). Emotions such as fear, disgust, and anger, for example, have been shown to guide choice (Lerner and Keltner, 2001). Thus, there are reasons to suspect that risk decision-making may be linked to individual differences in affective processing and the tendency to experience particular affective states.

Individual differences in the tendency to experience particular emotions can play a strong role in shaping cognitive processes associated with decision-making (Lerner and Keltner, 2000). Emotions serve as salient forms of information, signaling the presence of particular threats to be avoided or rewards to be acquired (Schwarz and Clore, 1983; Shackelford, LeBlanc and Drass, 2000). Emotions, in turn, promote cognitive responses facilitating the avoidance of threat and the acquisition of rewards (Maner et al., 2005). With respect to decision-making, some emotions (e.g., anger) promote decision-making biases that increase one's tolerance for risk, whereas other emotions (e.g., disgust) promote decision-making processes associated with risk-avoidance (Fessler, Pillsworth and Flamson, 2004). There are reasons for hypothesizing a link between anxiety and basic forms of risk-avoidant decision-making. Anxiety signals the presence of potential threat and promotes psychological responses that help individuals reduce their vulnerability to threat (Barlow, 1988; Butler and Mathews, 1987). Because threat avoidance has been implicated as a core component of risk-avoidant

decision-making, it has been hypothesized that individuals high in dispositional anxiety would be especially likely to exhibit pronounced forms of risk-avoidant decision-making.

Another reason to think that anxiety is associated with risk-avoidant decision-making is that anxiety promotes pessimistic appraisals of future events (Savitsky, Medvec, Charlton and Gilovich, 1998; Shepperd, Grace, Cole and Klein, 2005). Individuals with high trait anxiety, for example, report heightened perceptions of negative outcomes, across a range of behavioral contexts (Lerner and Keltner, 2000; Maner and Schmidt, 2006; Stober, 1997). The pessimistic outcome appraisals of anxious individuals often focus on their own anticipated emotions – anxious individuals typically anticipate high levels of distress given the occurrence of a negative event (Gasper and Clore, 1998). Such appraisals play an integral role in guiding choice, as decisions are often viewed in terms of their potential to cause strong negative emotions (Mellers, Schwartz, Ho and Ritov, 1997).

Clark and Watson's (1991) Tripartite Model implies that

anxiety has in common with depression and other forms of negative mood a component of negative affect; anxiety also has a unique component that is distinct from negative affect typically conceptualized as physiological hyper-arousal or anxiety sensitivity (Joiner et al, 1999). As a result, studies aimed at examining the specificity of anxiety-related phenomena often control for negative affect (Hayward, Killen, Kraemer and Taylor, 2000) because research suggested a link between depression and risk-avoidance (Allen and Badcock, 2003). Anxious individuals may have highly developed danger detection processes so that they become hyper-vigilant and exaggerate the severity of dangerous events in the environment (Eysenck, 1992). Thus, high trait anxiety individuals tend to attend selectively to threatening external stimuli (Broadbent and Broadbent, 1988); they tend to interpret ambiguous stimuli in a threatening fashion (Eysenck, 1992; MacLeod and Cohen, 1993) and perceive higher risk in decision situations (Stober, 1997). Anxiety is likely to cause decision makers to refocus

their attention from the decision task to the competition due to the information-processing techniques triggered by anxiety. While anxious decision makers tend to initially widely scan their environment, they then restrict their information processing and become more attention-selective (Eysenck, 1992); two of the primary fears that anxious individuals perceive are the fear of losing control of their environment (Beck and Emery, 1985) and the fear of failure (Elliot and McGregor, 1999).

Since decision makers have to make a commitment to participate in the competition, once they have done so, anxious individuals are likely to want to maintain their perceived control by winning the bidding contest.

### **Objective**

The objective of the study was to find out the effect of anxiety on decision making styles among college students.

### **Method**

#### **Sample**

The sample consisted of 200 students, including 100 female and 100 male students from various departments of Bharathiar University, Coimbatore. The

educational qualification was post-graduation and the age ranged from 21 to 23 years.

### **Tools**

The scales used for the purpose of the study were Sinha's Anxiety Scale (1968) and Decision Making Questionnaire by Leon Mann (1982).

The Anxiety Scale developed by Sinha (1968) provides a handy tool to measure the manifest anxiety of the subjects. It consists of 100 positively worded, highly discriminating Yes-No type items. The scale has been standardized on a sample of 203 male students belonging to an Engineering Institution. The split-half reliability is reported to be 0.85 (N=239) with an index of reliability of 0.92. The retest reliability is found to be 0.73 (N=88) with an index of reliability of 0.85. The scale is reported to correlate well with the modified Taylor's Manifest Anxiety Scales. Separate norms for men (310) and women (475) have been provided by the author for score interpretation.

Decision Making Questionnaire was designed by Leon Mann (1982) to measure decision-making styles based on the conflict theory of decision making. This

questionnaire consists of six sub-scales measuring decisional-coping patterns such as Vigilance, Hyper-vigilance, Defensive avoidance, Rationalization, Buck passing and Procrastination and totally 31 items.

**Analysis**

The collected data were tabulated and analyzed using correlation and 't' test.

**Discussion**

The present study was conducted to find out the effect of

**Table-1: Correlation between Anxiety and Decision-Making Styles**

Decision Making Style	Correlation Coefficient	Level of Significance
Vigilance (V)	0.38	0.05
Hyper-vigilance (HV)	0.07	N.S.
Defensive Avoidance (DA)	0.01	N.S.
Procrastination (P)	0.18	N.S.
Buck Passing (B)	0.12	N.S.
Rationalization (R)	0.16	N.S.

N.S. = Not Significant

**Table-2: Mean and S.D. and 't'-value for Males and Females in Anxiety and Different Decision-Making Styles**

Males = 100 Females = 100

Variables	Mean (Males)	S.D. (Males)	Mean (Females)	S.D. (Females)	't'
Anxiety	39.13	18.54	32.93	16.91	2.47**
Vigilance	4.93	2.53	3.62	2.21	3.88**
Hyper-vigilance	4.78	6.09	4.44	1.70	0.53 NS
Defensive Avoidance	4.77	1.90	5.33	1.80	2.13*
Procrastination	4.70	2.06	4.48	2.46	0.68 NS
Buck passing	5.57	1.89	5.37	1.82	0.75 NS
Rationalization	5.06	2.04	6.47	6.66	2.02 *

\* Significant at 0.01 level

\*\* Significant at 0.01 level N.S = Not Significant

anxiety on decision-making styles among college students. From the results presented in the table 1, it can be inferred that anxiety is positively correlated with vigilant type of decision-making style; it is the tendency to search carefully for information, to consider many alternatives, to consider information without bias, and to evaluate alternatives carefully before making a choice.

This may be because, when confronted with anxiety, the individual perceives a conflict and time pressure in making decisions, but they neither avoid, nor take a decision or seize upon a hastily contrived solution. These findings directly correlate with the study by Jones (1992) on 62 engineers who had come for an employment interview; it revealed that higher the anxiety, greater the chances of vigilant type of decision-making style among the subjects.

Further the results indicated that the individual's anxiety had no relationship with the hyper-vigilance type of decision making. It is the tendency to make decisions impulsively and to look for quick, easy solutions to problems was not related to anxiety but it could be the very nature of the individuals to make such sort

of decisions (Singh, Sinha and Shah, 1983). The defensive avoidance -a general tendency to avoid or escape having to make decisions was not related to anxiety (Clark, Watson and Tellegen, 1988). Thus the decisions that are quite often been avoided by individuals as a defense mechanism is only to avoid further complications or escapism rather than to make a decision. Procrastination -the tendency to put off making decision by doing other things or by thinking about the decision for too long -was not related to anxiety. When people have the tendency to postpone, they may not feel guilty for keeping it for quite a long time. Buck passing is to leave the hard decisions to others, to avoid taking responsibility for decisions and to blame others when the decision is wrong -is not related to anxiety. It could be that when the very nature of a person is to push off the things to others to decide, then certainly it may not lead to any anxiety at all. Similarly rationalization which is also one of the defense mechanisms was not related to anxiety, thus proving that it is a tendency to avoid the reality of decisions by ignoring or denying unpleasant aspect of the decision or by concentrating only on

positive aspects of the choice (Velayudhan and Kaliappan, 1993).

This finding relates closely to the observations made by Germeijs, Verschueren and Soenens (2006) on undergraduate students, revealing that as the subjects become more anxious, they are less likely to rationalize the decisions they have taken. The reason that lies behind this finding may be that anxious people are doubtful whether they will be able to make right and effective decisions that guarantee success in their future.

Table 2 shows the results of the 't'-test on the anxiety and the decision-making styles of the male and female students. There was a significant difference in the anxiety level between the male and female students. Male students showed high amount of anxiety than the female students; this implies that males are more anxious since they are supposed to get their course completed on time and look for a job and settle down to take care of the family responsibilities (Janis and Field, 1959).

Male students were more vigilant than the female students. It implies that the male students used

a positive decision-making style to approach a problem and make a decision whereas females used more of negative decision-making styles like the defensive avoidance much more than the male students. Further, they had a tendency to rationalize their decisions more than the male students. The result correlates with the findings by Onken and Hastic (1985) who studied 200 employees in the stock exchange and reported that women rationalized their decisions more than men. This may be because of the fact that women considered themselves to be very practical and logically oriented.

Both male and female students used similar kind of hyper-vigilant decision-making style which is the tendency to make decisions impulsively and to look for quick, easy solutions to problems. Similarly, Procrastination style of decision making is similar for both the groups which have a tendency to put off making decision by doing other things or by thinking about the decision for too long. Further Buck passing was also of the same level among the male and female students which is to leave the hard decisions to others, to avoid taking responsibility for decisions and to blame others when the decision is

wrong (Germeijs, Verschueren and Soenens, 2006).

### Conclusion

It can be concluded that as the students become more anxious, they tend to adopt vigilant decision-making style. Anxiety does not make the students adopt either to be hyper-vigilant, defensive in avoiding decisions, procrastinating or passing on decision-making to someone else. As the students become more anxious, they are less likely to rationalize their decision making. Male students are higher in vigilance than female students and female students are higher in defensive avoidance and rationalization than their male counterparts.

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