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A Study of State-Trait Anxiety and Problem Solving of P.G. Students of Kashmir University

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ABSTRACT

The purpose of the research is to findout the state-trait anxiety and problem solving of p.g. students of Kashmir University. A non-random purposive sample of 100 Kashmir University P.G. Students was select for the present study. Out of these; 50 were P.G. male Students and 50 were be P.G. female Students of Kashmir University, J&K and the remaining 50 of them were rural students and 50 were urban students. The sample for the present study was collected from different departments of Kashmir University. There are 41 departments of Kashmir University out of them the investigator collect the only four departments, viz, Department of Biology, Department of Psychology, Department of Education and Department of Law. The State-Trait Anxiety Inventory developed by C.H. Spielberger and Problem Solving Ability Test: Problem Solving Ability Test by Dubey, L.N. (2006) was administered. The study revealed that among male Kashmir University students, 28.0% exhibited a low level of State Trait Anxiety, 52.0% showed a moderate level, and only 20.0% experienced a high level. Likewise, among female students, 32.0% had low anxiety, 50.0% moderate, and 18.0% high anxiety. When comparing rural and urban students, 26.0% of rural students had low anxiety, 50.0% moderate, and 24.0% high, while 32.0% of urban students had low anxiety, 48.0% moderate, and 20.0% high. Notably, there was no significant difference in mean anxiety levels between male and female students. Moreover, both genders exhibited similar anxiety levels. However, significant variation in anxiety levels emerged between rural and urban students, with urban students reporting higher anxiety. Shifting to Problem Solving Ability, 10.0% of male students had low ability, 50.0% medium, and 40.0% high ability. Among female students, 20.0% had low ability, 58.0% medium, and 22.0% high ability. Urban students displayed 12.0% low ability, 52.0% medium, and 36.0% high ability, whereas rural students had 8.0% low ability, 70.0% medium, and 22.0% high ability. Furthermore, significant differences existed in problem-solving ability between male and female students, favoring males, and between rural and urban students, favoring urban students.

Key Words : State-trait, Anxiety, Problem Solving, P.G. Students, Kashmir University

INTRODUCTION

The state anxiety is the similar as the stress that has been conceptualized in terms of the imbalance between environmental demands and personal resources. Speilberger and Sydeman (1983) reported that state anxiety and trait anxiety are different. State anxiety in career decision making is considered to be a transitory and largely normal emotional state; trait anxiety is considered to be a stable characteristic reflecting individual differences in the tendency to experience perceptions that a range of situations can be threatening. The relationship of state and trait anxiety to career indecision is especially important. Relevant studies have found that state anxiety is consistently related to high levels of career indecision (Cooper, Fuqua, and Hartman, 1984; Fuqua, Seaworth, and Newman, 1987; Heppner and Hendricks, 1995a). In addition, based on career counseling theories, some studies confirmed that problem solving appraisal is related to career indecision and career decision making.

The State-Trait Anxiety Inventory (STAI, Spielberger and Reheiser, 2009) was designed to evaluate both state and trait anxiety. Spielerger (1972) defined state anxiety

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as a temporary emotional state, and trait anxiety as an aspect of personality emphasizing a personal tendency to worry. The 20 items State Anxiety subscale (AState) and the 20 items Trait Anxiety subscale (A-Trait) were used to represent two different models of anxiety. Both the A-State and A-Trait scales are made up of twenty 4-point scale items. Scores were computed by summing ratings across items, with higher scores representing higher anxiety on both subscales. Test-retest reliabilities for the A-State scale are low (.16 to .54) as would be expected for a transitory emotional state while they are higher (.73 to .86) for the A-Trait scale. Dreger and Katkin's review (1978) of the State-Trait Anxiety Inventory concluded it was both reliable and valid. Internal consistency reliabilities for the sample used in Dreger and Katkin's study were .62 and .84 for the State- and Trait-Anxiety subscales, respectively. The Chinese version of the State-Trait Inventory, which is translated and modified from the English version, yielded internal consistency reliability (Cronbach alpha) of .85 for all items (Saunders, Peterson, Sampson and Reardon, 2000). Internal consistency reliability for the present sample was .88 and .89 for A-State and A-Trait, respectively. The Problem-Solving Inventory (PSI; Heppner and Peterson, 1982) is an instrument that assesses individuals' perceptions of their problem-solving behavior. It consists of 32 six-point Likert scale items, where low scores indicate behaviors and attitudes typically associated with "effective" problem solving. Since the PSI is a self-rating questionnaire, scores should not be considered synonymous with subjects' actual level of problem-solving skills (Heppner, 1988). Factor analysis has revealed three distinct constructs: problem-solving confidence (11 items), approach-avoidance style (16 items), and personal control (5r items). Reliability estimates revealed the construct were internally consistent (.72-.90); N=150) and stable over a 2-week period (.83-.89; N=31). In addition to the three factor scores, a total PSI score is used as a single, general index of problem-solving appraisal. The instrument is developed and assessed in personal life how to deal with the personal difficulty or the problem at present by Heppner and Cooper. Regard this quantity form as the form assessment (formative evaluation). Demand to join answer this of students of class' group of the career and assess forms at the end of class' group in one term. Later followed the trail of the interview group's effect did for self-criticism and improved group's scheme quality and dependence reference tool in future.

Problem can be defined as a situation which makes a discomfort for the individuals that encounter with the situation. This kind of problematic discomfort leads individuals into imbalance and this ambiguous situation reaches balance only by a plausible, reasonable, and practical solution. In parallel with these descriptions, Dewey (1991) defined a problem as an ambiguity in an individual's mind while analyzing a problem or when they are faced with a situation. Problem is a situation that individuals may encounter anytime throughout their lives. It is important to learn the problem solving skill to overcome the problems encountered.

Problem solving usually refers to handling and evaluating problems, and arriving at a solution (Heppner and Petersen, 1982). According to findings of recent researches, one of theimportant aspects of problem solving process is to differentiate the known from unknown (DeBellis and Goldin, 1997; Goldin, 1988; 1998). Many researchers discussed that there is no solely one way to solve a problem. D'zurilla and Goldfried (1971) stated that the strategies people use while solving a problem are frequently based on their social environments, previous learnings, and personal characteristics; because A. E. Ivey, M. B. Ivey, and Simek-Morgan (1993) argued that individuals spend most of their time on solving and providing a conclusion to the problems they are faced with. To deal with how to solve a problem is an important asset for both formal and lifelong learning processes. This can be done with how to solve the steps of problem solution. Polya (1945) divided problem solving process into four stages: understanding the problem, determining the correct strategy for the problem, implementing the determined strategy, and evaluating the solution. Furthermore, problem solving strategies, include drawing a table or diagram, making a connection, systematically listing, writing an equation or in equation, benefitting from solutions to similar problems, assumption and checking,

Significance of the Study:

University/college students need to overcome different career related problems during their college/ university years. To respond problems in any stage of life is a very complicated process, not only depending on personal factor but also environmental factors (Zeidner, 2007; Hamarta, 2009). A review of the career theory and career counseling literature Trevor-Roberts (2006) indicates that although contemporary approaches have

been offered to respond to the changed nature of career, none of the approaches have identified uncertainty as a core part of individuals' experience of their career. For college students' academic career, Peng's study (2004) found that college career indecision situations varied by academic years and found that higher academic year students have different career education needs than lower academic year students. In addition, female college students more value career planning than male college students who value more on finding jobs. A survey from 1995 to 2004 with a sample of 31,731 first-year college students, the study results revealed that male students emphasis more on making money, female students emphasis more on working with people and contributing to society. White college students placed a greater emphasis on having independence and intrinsic interest in the field while African Americans and Asian Americans espoused higher extrinsic work values (Duffy and Sedlacek, 2007). Therefore, to design higher education courses or program need to be aware of the age, gender and culture background factors.

Objectives of the Study:

The following objectives have been formulated for the present Study:

1. To study the level of State-Trait Anxiety among Kashmir University P.G. Students.
2. To study the level of Problem Solving among Kashmir University P.G. Students.
3. To compare State-Trait Anxiety among Kashmir University P.G. Students with respect to their gender-wise.
4. To compare State-Trait Anxiety among Kashmir University P.G. Students with respect to their domicile.
5. To compare the Problem Solving among Kashmir University P.G. Students with respect to their gender-wise.
6. To compare the Problem Solving among Kashmir University P.G. Students with respect to their domicile.
7. To findout the relationship between State-trait Anxiety and Problem Solving among Kashmir University P.G. Students.

Hypotheses:

The following hypotheses were formulated for the present study:

$\mathbf{H_{01}}$ There is no significant difference in State-Trait Anxiety among Kashmir University P.G. Students with respect to gender.

$\mathbf{H_{02}}$ There is no significant difference in State-Trait Anxiety among Kashmir University P.G. Students with respect to domicile.

$\mathbf{H_{03}}$ There is no significant difference in Problem Solving among Kashmir University P.G. Students with respect to gender.

$\mathbf{H_{04}}$ There is no significant difference in Problem Solving among Kashmir University P.G. Students with respect to domicile.

$\mathbf{H_{05}}$ There is no significant correlation State-trait Anxiety and Problem Solving among Kashmir University P.G. Students.

Operational Definitions:

1. **State-Trait Anxiety:** the state-trait anxiety for the present study was measure with the help C.H. Spielberger's State-Trait Anxiety Scale.
2. **Problem Solving Ability**: The problem solving for the present study was measured with the Dubey's Problem Solving Ability Test. Problem Solving Ability Tool comprises 20 items. In this tool, some problem-related statements along with their four possible answers are given.
3. **P.G. University Students:** The P.G. Students for the present was considered those students who are enrolled in different P.G. Departments of Kashmir University.

METHODOLOGY

Sample :

A non-random purposive sample of 100 Kashmir University P.G. Students was select for the present study. Out of these; 50 were P.G. male Students and 50 were be P.G. female Students of Kashmir University, J&K and the remaining 50 of them were rural students and 50 were urban students. The sample for the present study was collected from different departments of Kashmir University. There are 41 departments of Kashmir University out of them the investigator collect the only four departments, viz, Department of Biology, Department of Psychology, Department of Education and Department of Law.

The breakup of the sample subject as:

	Male		Female		Total
	Rural	Urban	Rural	Urban	
P.G. Students	25	25	25	25	100

Tools used :

1. **The State-Trait Anxiety Inventory** developed by C.H. Spielberger. This self-report measure indicates the intensity of feelings of anxiety; it distinguishes between state anxiety (a temporary condition experienced in specific situations) and trait anxiety (a general tendency to perceive situations as threatening). It was originally developed as a research instrument to study anxiety in normal population samples. Development of the STAI began in the early 1960s with research on high school and college students. Items for the scale were drawn from the TMAS and from Cattell's scale, and further items were written as the development progressed (1), p19; (6). The initial intent was to select items that could be used both for state and trait anxiety, but using a different time reference (e.g., feelings now, versus feelings in general). This proved infeasible, however, as some of the most suitable items for each scale could not be phrased to fit the other: "I feel upset" was a good state item, but did not fit on the trait scale were common to both.
2. **Problme Solving Ability Text :** Problem Solving Ability Test by Dubey, L.N. (2006). Problem Solving Ability Tool comprises 20 items. In this tool, some problem-related statements along with their four possible answers are given. Responses are given to the serial number of correct answer in the box given against that statement. The correctly answered questions were given one mark and zero mark for the wrong answers. The maximum marks in the test are 20 and minimum mark is 0. The Problem Solving Ability test used.
3. **Reliability and Validity:** In this tool, test-retest reliability was found to be 0.87. The construct validity approach concerns the degree to which the test measures the construct it was designed to measure. The experts agreed that the items framed out by the researcher adequately.

Statistical Treatment :

- Mean
- S.D.
- t-test
- Correlation

RESULTS AND DISCUSSION

The Table 1 shows the percentage-wise comparison between male and female Kashmir University students on their level of State Trait Anxiety. The results of the table indicates that 28.0% male Kashmir University students have low level of State Trait Anxiety, 52.0.% male Kashmir University students have moderate level of State Trait Anxiety and only 20.0% male Kashmir University students have high level of State Trait Anxiety.

Table 1: Showing the percentage comparison between male and female Kashmir University students on their level of State Trait Anxiety

Level of State Trait Anxiety	Male		Female	
	N	%age	N	%age
Low	14	28.0%	16	32.0%
Moderate	26	52.0%	25	50.0%
High	10	20.0%	9	18.0%
Total	30	100.0%	60	100.0%

On other hand, the table indicates that 32.0% female Kashmir University students were low level of State Trait Anxiety, 50.0% female Kashmir University students were moderate level of State Trait Anxiety and only 18.0% female Kashmir University students have low level of State Trait Anxiety.

The Table 2 shows the percentage-wise comparison between rural and urban Kashmir University students on their level of State Trait Anxiety. The results of the table indicates that 26.0% rural Kashmir University students have low level of State Trait Anxiety, 50.0% rural Kashmir University students have moderate level of State Trait Anxiety and only 24.0% rural Kashmir University students have high level of State Trait Anxiety.

Table 2 : Showing the percentage comparison between rural and urban Kashmir University students on their level of State Trait Anxiety

Level of State Trait Anxiety	Rural		Urban	
	N	%age	N	%age
Low	13	26.0%	16	32.0%
Moderate	25	50.0%	24	48.0%
High	12	24.0%	10	20.0%
Total	30	100.0%	60	100.0%

On other hand, the table indicates that 32.0% urban Kashmir University students were low level of State Trait Anxiety, 48.0% urban Kashmir University students were moderate level of State Trait Anxiety and only 20.0% urban Kashmir University students have low level of State Trait Anxiety.

The Table 3 shows the mean comparison between male and female Kashmir University students on their State Trait Anxiety. The results of data of above table indicate that there is insignificant mean comparison between male and female Kashmir University students on their State Trait Anxiety. The table further indicates that both male and female Kashmir University students have similar level of State Trait Anxiety.

Table 3: Showing the mean comparison between male and female Kashmir University students on their State Trait Anxiety

Group	N	Mean	S.D	t-value	Level
Male	50	41.97	5.85	1.89	Insignificant
Female	50	41.25	4.94		

The Table 4 shows the mean comparison between rural and urban Kashmir University students on their State Trait Anxiety. The results of data of above table indicate that there is a significant mean comparison between rural and urban Kashmir University students on their State Trait Anxiety. The table further indicates that urban university students have high level of state strait anxiety as compared to rural university students.

Table 4 : Showing the mean comparison between rural and urban Kashmir University students on their State Trait Anxiety

Group	N	Mean	S.D	t-value	Level
Rural	50	45.2	6.85	3.14	Significant
Urban	50	40.0	4.94		at 0.01 level

The Table 5 shows the frequency level of Problem Solving Ability among Male and Female Kashmir University Students. The table reveals that only 10.0 per cent Male Kashmir University Students have low level of Problem Solving Ability , 50.0 per cent Male Kashmir University Students have medium level of Problem Solving Ability and 40.0 per cent Male Kashmir University Students have high level Problem Solving Ability . In case of Female Kashmir University Students, 20.0 per cent Female Kashmir University Students have low level of Problem Solving Ability, 58.0 per cent Female Kashmir University Students have medium level of Problem Solving Ability and 22.0 per cent Female Kashmir University Students have high level of Problem Solving Ability.

Table 5: Frequency distribution of level of Problem Solving Ability among Male and Female Kashmir University Students

Levels	Male Kashmir University Students		Female Kashmir University Students	
	N	Percentage	N	Percentage
Low	5	10.0	10	20.0
Medium	25	50.0	29	58.0
High	20	40.0	11	22.0
Total	50	100.0	50	100.0

The Table 6 shows the frequency level of Problem Solving Ability among Urban and Rural Kashmir University Students. The table reveals that only 12.0 per cent Urban Students have low level of Problem Solving Ability , 52.0 per cent Urban Students have medium level of Problem Solving Ability and 36.0 per cent Urban Students have high level Problem Solving Ability . In case of Rural Students, 8.0 per cent Rural Students have low level of Problem Solving Ability , 70.0 per cent Rural Students have medium level of Problem Solving Ability and 22.0 per cent Rural Students have high level of Problem Solving Ability.

Table 6: Frequency distribution of level of Problem Solving Ability among Rural and Urban Kashmir University Students

Levels	Urban Students		Rural Students	
	N	Percentage	N	Percentage
Low	6	12.0	4	8.0
Medium	26	52.0	35	70.0
High	18	36.0	11	22.0
Total	50	100.0	50	100.0

The Table 7 shows the mean comparison between male and female Kashmir University students on their Problem Solving Ability. The results of the table indicate that there is a significant difference between male and female Kashmir University students on the Problem Solving Ability. Further, Male university students have better problem solving ability as compared to female university students.

The Table 8 shows the mean comparison between rural and urban Kashmir University students on their Problem Solving Ability. The results of the table indicate that there is a significant difference between rural and

Table 7: Showing the mean comparison between male and female Kashmir University students on their Problem Solving Ability					
Gender	N	Mean	Std. Deviation	t-value	Level of Significance
Male Students	50	19.20	8.159	2.79	Significant at 0.01 level
Female Students	50	17.50	7.533		

Table 8 : Showing the mean comparison between rural and urban Kashmir University students on their Problem Solving Ability					
Gender	N	Mean	Std. Deviation	t-value	Level of Significance
Rural Students	50	17.02	6.241	1.14	Insignificant
Urban Students	50	17.64	7.361		

urban Kashmir University students on the Problem Solving Ability. Both the groups *i.e.* rural and urban Kashmir University Students have same problem solving ability.

Conclusion:

- It was found that 28.0% male Kashmir University students have low level of State Trait Anxiety, 52.0.% male Kashmir University students have moderate level of State Trait Anxiety and only 20.0% male Kashmir University students have high level of State Trait Anxiety.
- It was found that 32.0% female Kashmir University students were low level of State Trait Anxiety, 50.0% female Kashmir University students were moderate level of State Trait Anxiety and only 18.0% female Kashmir University students have low level of State Trait Anxiety.
- It was found that 26.0% rural Kashmir University students have low level of State Trait Anxiety, 50.0% rural Kashmir University students have moderate level of State Trait Anxiety and only 24.0% rural Kashmir University students have high level of State Trait Anxiety.
- It was found that 32.0% urban Kashmir University students were low level of State Trait Anxiety, 48.0% urban Kashmir University students were moderate level of State Trait Anxiety and only 20.0% urban Kashmir University students have low level of State Trait Anxiety.
- It was found that there is insignificant mean comparison between male and female Kashmir University students on their State Trait Anxiety.
- It was found that both male and female Kashmir University students have similar level of State Trait Anxiety.
- It was found that there is a significant mean comparison between rural and urban Kashmir University students on their State Trait Anxiety.
- It was found that urban university students have high level of state strait anxiety as compared to rural university students.
- It was found that only 10.0 per cent Male Kashmir University Students have low level of Problem Solving Ability, 50.0 per cent Male Kashmir University Students have medium level of Problem Solving Ability and 40.0 per cent Male Kashmir University Students have high level Problem Solving Ability.
- It was found that 20.0 per cent Female Kashmir University Students have low level of Problem Solving Ability , 58.0 per cent Female Kashmir University Students have medium level of Problem Solving Ability and 22.0 per cent Female Kashmir University Students have high level of Problem Solving Ability .
- It was found that 12.0 per cent Urban Students have low level of Problem Solving Ability, 52.0 per cent Urban Students have medium level of Problem Solving Ability and 36.0 per cent Urban Students have high level Problem Solving Ability.
- It was found that 8.0 per cent Rural Students have low level of Problem Solving Ability , 70.0 per cent Rural Students have medium level of Problem Solving Ability and 22.0 per cent Rural Students have high level of Problem Solving Ability .
- It was found that there is a significant difference between male and female Kashmir University students on the Problem Solving Ability.
- It was found that male university students have better problem solving ability as compared to

female university students.

- It was found that there is a significant difference between rural and urban Kashmir University students on the Problem Solving Ability.
- It was found that both the groups *i.e.* rural and urban Kashmir University Students have same problem solving ability.

Implications :

- To decrease state anxiety of university students can be increased by developing their problem solving skills by increasing problem solving confidence, personal control and increasing the content of spirituality (means-end thinking related to search meaning in career). For career counseling/education intervention, we also need to pay more attentions on decreasing state anxiety of female university students by increasing their problem solving confidence.
- Problem-Solving Confidence and Approach-Avoidance Style, may be the strongest contributors to problem-focused coping reports and suggested that a number of career counseling interventions might profitably focus on the various components of problem solving appraisal.
- Finally, the relationship of state anxiety, problem solving status and spirituality in the current study can be taken into consideration when helping professions developing career education courses or career counseling programs.
- Moreover, future studies of university students' state anxiety need to be designed to examine the problem solving process with more explicit attention to the role of spirituality.

REFERENCES

Akin, A. (2008). Self-Efficacy, Achievement Goals and Depression, Anxiety and Stress: A Structural Equation Modeling. World Applied Sciences Journal,

Bairamnejad (2001). Ways of Dealing with Stress and Its Relationship with the sense of Self-efficacy and Self-esteem in high school students in Naghade. Naghade: Islamic Azad University, Sanandaj Branch.

Bandura, A. (1993). Perceived Self-efficacy in Cognitive Development and Functioning. *J. Educational Psychologist*, **28**: 117-148.

Bandura, A. (1997). Self-efficacy: The Exercise of Control. New York: W.H. Freeman.

Ghaderi, A. and Salehi, M. (2011). A Study of the Level of Self-Efficacy, Depression and Anxiety between Accounting and Management Students: Iranian Evidence. *World Applied Sciences J.*, **12**(8): 1299-1306.

Kaplan, Harold and Sadok, B. (2007). Dictionary of Psychology-Psychiatry. Trans. Nosrat Poorafkari. Tehran: Contemporary Culture Publishing Center.

Kheir, M. and Ostovar, S. (2007). The Relationship between Social anxiety and Cognitive Biases in Adolescents. *J. Psychiatry & Clinical Psychology*, **3**: 256-263.

Ma'dangan (2008). The Relationship between Self-efficacy and Motivation for Progress in Female and Male High school Students in Hashtgerd. MA Thesis. University of Sanandaj.

Mirsamiee, M. and Ebrahimi, S. (2008). Relationship Between self-efficacy, Social Support and Mental Health Anxiety in Tabatabaei University Students. *J. Psychology & Educational Sciences*, pp: 91-73.

Nazari, B. (2005). Imaginary Relationship between Self-efficacy and Anxiety in College Students in Karaj. Karaj: Karaj Azad University. MA Thesis.

Orhan, F. (2007). Applying Self-regulated Learning Strategies in a Blended Learning Instruction. *World Applied Sci. J.*, **2**(4): 390-398.

Ouras, A. (1992). Personality Pyschology (Theory and Processes). Trans. Jamal Siyavashfar. Tehran: Be'sat Publishing Center."Psychological Aspects of Online Discussion: Implication for Online Learning Approaches. *World Applied Sci. J.*, **14**: 31-35.

Sappington, A. (1998). Mental Health. Trans. Hamidreza Husseinshahi Baravati. Tehran: Ravan Press.

Schultz, D. and Schultz, S. (1998). Theories of Personality. [Trans.] Seyyed Mohammad, 9th edition. Wadsworth: Thomson.

Speilberger, C.D. (1977). State-trait Anxiety and Interactional Psychology. [book auth.] D. Magnusson and N.S. Endler. Personality at the Crossroads: Current Issues in Interactional Psychology. New York: LEA/Wiley, pp: 173-183.

Vaghari (2005). The Relationship between Identity Styles and Imaginary Self-efficacy in High school Students in Karaj. Karaj: Karaj Azad University, MA Thesis.

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