

# EFFECT OF GENDER DIFFERENCE AND LOCUS OF CONTROL ON META WORRY, SOCIAL WORRY, HEALTH WORRY AND OTHER DOMAINS OF WORRY

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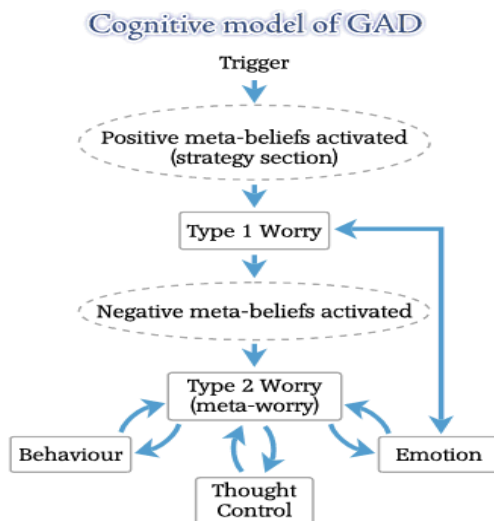
**ABSTRACT:** *The present study was conducted to see whether there is any effect of gender and locus of control on meta worry, social worry, health worry, and other different domains of worry. Total 120 participants (60 males and 60 females) were chosen for the present study. The participants completed the questionnaires of General Health Questionnaire (GHQ-28), Internal-External Locus of Control Scale (I-E), Anxious Thought Inventory (AnTI), Student Worry Questionnaire (SWQ-30). In the present study GHQ was administered to choose only those participants for the study who scored below the cut-off point in GHQ. Appropriate statistical analyses of data were done. It was found that Males were more externalized than females. There was a significant effect of locus of control on meta worry. It was seen that gender has a significant effect on health worry, financial concern, significant others wellbeing concern, general anxiety symptom. There was a significant effect of interaction between gender with locus of control on significant others well-being concern. There was a significant positive relationship between different dependent variables which is discussed later in this study.*

**Key Words:** *Worry, Meta worry, Locus of control, other domains of worry*

## I. INTRODUCTION

Worry is a thought activity characterized by a predominance of anxious predictors about possible future negative events (Borkovec, 1994). Worry initially emerged as a construct of interest in the test anxiety literature when Liebert and Morris (1967) linked task performance anxiety to worry, which they described as cognitive concern about personal performance, consequences of failure, negative self-evaluations or expectations, and comparisons of personal ability relative to the performance of others (Deffenbacher, 1980; Liebert & Morris, 1967; Morris, Davis, & Hutchings, 1981). A belief of individuals about controllability over what happens to them in life is a core element of their understanding of how they live in the world (Shapiro, Schwartz & Austin, 1996). Locus of control is a personality construct that reflects one’s belief or perception about who controls life and the environment (Lefcourt, 1976). Internal locus of control (ILOC) is characterized by the belief that consequences are a result of one’s own behavior. On the other hand, external locus of control (ELOC) is characterized by the belief that consequences are a result of fate, luck, or powerful others than males.).

### Meta worry



The concept of meta-worry was introduced as a salient feature of the metacognitive model of worry. The metacognitive model proposes that meta-worry is the primary causal factor in the maintenance of pathological worry and GAD (Wells & Carter, 1999). A cognitive model of GAD has recently been advanced by the author (Wells, 1995) describing the processes involved in the development and maintenance of the problem. An outline of the model is depicted in Figure 1.

Figure 1: A Meta cognitive model of the processes Involved in the maintenance of generalized anxiety disorder.

The model is based on a differentiation between two types of worry: Type 1 worry, which is worry about external events and non-cognitive internal events; and Type 2 worry (meta worry), which is worry about one's own thinking (Wells, 1994b, 1995). Type 2 worrying is involved in the transformation of normal worry into problematic varieties like that observed in GAD. For example, an individual may believe that his or her worry is dangerous to their health (Cartwright-Hatton & Wells, 1997), such that –"worrying puts my body under a lot of stress; my worrying could make me go mad" (Cartwright-Hatton & Wells, 1997, p. 284).

Kubzansky et al. (1997), for example, showed in a prospective study that men who worried more about social conditions (e.g., economic recession) were more likely to suffer from coronary heart disease. Social worry is the fear of interaction with other people that brings on self-consciousness, feelings of being negatively judged and evaluated, and, as a result, leads to avoidance. A study using data from the American Health and Retirement Study and the Survey of Consumer Finances demonstrated that households of older persons who experienced adverse financial events worried more about the adequacy of their financial resources in retirement (Owen & Wu, 2007). Chronic worry and emotional stress can trigger a host of health problems like - Difficulty swallowing, Dizziness, Dry mouth, Fast heartbeat, Fatigue, Headaches, Irritability.

In the present study an attempt has been made to see the effect of gender difference, locus of control on meta worry, social worry, health worry and other different domains of worry in student population.

## II. METHODOLOGY

### Objectives

To determine whether there is any significant difference between the mean values of both male and female for locus of control.

- To determine whether there is any significant effect of Locus of control on meta worry, social worry, health worry, and other different domains of worry.
- To determine whether there is any effect of Gender on meta worry, social worry, health worry, and other different domains of worry.
- To determine whether is any significant effect of interaction between Gender and locus of control on meta worry, social worry, health worry, and other different domains of worry.
- To determine whether there is any significant relationship between all the dependent variables.

### SAMPLE

A total of 120 participants (60 males and 60 females) were selected and their age range varied between 19-23 years. Sample was selected from different colleges and universities. Participants should not have any own source of income and should have only one working parent. Participants were from urban residence. Those Participants who had a greater score (more than cut off point (4) in General Health Questionnaire, any history of psychiatric/ physical illness and have witnessed any death or any major incident within 1 year of his/her life that led to trauma or shock were excluded.

### MEASURES

#### a) Information schedule

Information schedule is used to collect primary Identification information about the participants. This includes their name, age, sex, Educational qualification, occupation, family income, number of family members, family type, residence, any significant illness in family whether physical or psychological. It also aims to find whether the participants have witnessed any incidence of sudden trauma in last two years, any significant shocking event, whether they have any tension (positive or negative) and negative thought that may be disturbing in their life.

#### b) General Health Questionnaire- 28

GHQ developed by Goldberg and Hiller (1979) was designed to be a self-administered screening test aimed at detecting psychiatric disorders among respondents. This scale gives a measure of common mental health problems of depression, anxiety, somatic symptoms, and social withdrawal. Scoring was done by GHQ method (0-0-1-1) i.e., Not at all, and No more than usual score 0, and Rather more than

usual and Much more than usual score 1. In this study cut off point of psychiatric morbidity was considered as 4, i.e., score of 4 indicates a non-psychiatric case.

- c) The Rotter Internal- External Locus of Control (Rotter, 1966)  
In its present form, it consists of 23question pairs, using a forced-choice format, plus 6 filler questions. Internal statements are paired with external statements. One point is given for each external statement selected. Scores can range from 0 to 23. The scoring is in the direction of externality as the scoring key was indicative of External Locus of Control. The higher the score, the greater the degree of External Locus of Control.
- d) The Anxious Thoughts Inventory  
AnTI developed by Wells, 1994 measures proneness to worry and assesses social worry (SW) and health worry (HW) i.e., Type 1 worry and meta-worry (MW) i.e., Type 2 worry. The 22 items are rated on a four-pointLikert scale that ranges from 1 (*almost never*) to 4 (*almost always*). Items (1,2,8,9,12,14,17,18,20) measures social worry, items (4,5,7,10,15,19) measures health worry and items (3,6,11,13,16,21,22)measures meta worry.
- e) Student worry questionnaire (SWQ-30)  
Validation studies by Osman and his colleagues (Carter, 2002; Osman et al., 2001)indicates that SWQ is a self - administering screening test. Items for measuring worrisome thinking (SWW) are (1,10,11,14); Items for measuring financial related concern (SWF) are (12,16,23,30); Items for measuring significant other’s wellbeing concern (SWSO) are (5,8,13,19); Items for measuring social adequacy concern (SWSA) are (3,22,24,29); Items for measuring academic concern (SWA) are (7,17,20,27) and Items for measuring general anxiety symptom (SWGAS) are (9,15,25,28). All the above-mentioned subscales are scored simply by totaling the numbers endorsed by respondents.

**PROCEDURE**

At first the participants were provided with the total booklet containing the information schedule and four different questionnaires which are mentioned below. All the questionnaires were self-rated.The order of questionnaires was kept same for each participant - a) Information Schedule, b) General Health Questionnaire as screening inventories, c) Internal-External Locus of Control, d) Anxious Thought Inventory, e) Student Worry Questionnaire.After the completion of the test the participants were provided information about the different tests that have been administered and about the aim and objectives of the research. Following data collection, the responses were scores according to the procedures given in the manual.

**III. STATISTICAL ANALYSIS**

The data was statistically analysed. Mean and standard deviation for the different variables were computed. The data were subjected to appropriate statistical analysis using the “Statistical Package for Social Sciences” (S.P.S.S), Windows Version 16.0. The parametric tests used to analyse the data were-

- t-test – to obtain the significant difference between two means i.e., gender and locus of control for both male and female.
- Two – way ANOVA – to obtain the significant difference and interaction effects of 2 variables i.e., (gender, and locus of control) on meta worry, health worry, social worry, and different domains of worry.
- Pearson correlation – to see the extent of association present among the different variables and their respective dimensions.

**IV. RESULTS**

**TABLE 1: Table shows means and ‘t’ value of both the genders (Male and Female) for locus of control.**

Gender		Mean	t value	Sig
Locus of control	Male	11.133	4.092	.001**
	Female	8.050		

\*=significant at 0.05 level; \*\*= significant at 0.01 level.

The above table shows that the mean value for male is greater than the mean value for female.

**TABLE 2: Table represents the mean values and standard deviation values obtained from both the genders for Social worry, Health worry, Meta worry, Worrisome thinking, Financial concern, Social adequacy concern, Significant others wellbeing concern, Academic concern, General anxiety symptom**

Variables	Gender		Locus of control		Gender X Locus of control	
	F	Sig	F	Sig	F	Sig
Social worry	2.485	.118	.001	.980	1.283	.260
Health worry	13.58	.001**	.205	.651	.649	.422
Meta worry	3.398	.068	7.068	.009**	.069	.793
Worrisome concern	3.688	.057	.511	.476	2.773	.099
Financial concern	29.24	.001**	.071	.790	.104	.748
Social adequacy concern	2.209	.140	1.675	.198	.908	.343
Significant others wellbeing concern	4.746	.031*	2.670	.105	3.946	.049*
Academic concern	1.863	.175	1.850	.176	1.920	.169
General Anxiety Symptom	5.834	.017*	.071	.790	.012	.912

**TABLE 3: Table represents the 'F' values and significance level obtained from two-way Anova for the significance of difference among 2 variables Gender (N= 120), locus of control (N= 120) and their interactions on Social worry, Health worry, Meta worry, Worrisome thinking, Financial concern, Social adequacy concern, Significant others wellbeing concern, Academic concern, General anxiety symptom**

Variables	Males		Females	
	Mean	SD	Mean	SD
Social worry	16.51	6.16	15.51	3.92
Health worry	8.55	1.92	10.23	4.17
Meta worry	12.11	4.83	17.18	4.16
Worrisome concern	8.65	4.07	7.85	3.11
Financial concern	10.18	5.03	5.50	3.08
Social adequacy concern	9.45	4.46	7.70	4.35
Significant others wellbeing concern	6.05	3.37	7.45	4.08
Academic concern	10.63	5.17	9.05	3.73
General Anxiety symptom	5.30	2.57	4.11	1.81

\*= significant at 0.05 level; \*\*= significant at 0.01 level

**TABLE 4: Pearson's product moment correlation and significance level showing the extent of association among the different variables for both males and females.**

		LOC	SW	HW	MW	SWW	SWF	SWSA	SWSO	SWA	SWGAS
LOC	Pearson Correlation		.154	.169	-.135	.085	.241**	.212*	.018	.206*	.180*
	Sig. (2-tailed)		.093	.065	.141	.354	.008	.020	.845	.024	.049
	Sig. (2-tailed)		.458	.231	.373	.884	.017	.467	.818	.362	.274
SW	Pearson Correlation			.464**	.513**	.231*	.181*	.098	.146	.101	.225*
	Sig. (2-tailed)			.001	.001	.011	.048	.289	.112	.272	.014

HW	Pearson Correlation				.296**	.217*	.258**	.136	.162	.194*	.255**
	Sig. (2-tailed)				.001	.017	.005	.140	.076	.033	.005
MW	Pearson Correlation					.179	.084	.063	.071	-.018	.298**
	Sig. (2-tailed)					.050	.359	.491	.438	.849	.001
	Sig. (2-tailed)					.766	.593	.002	.211	.726	.452
SWW	Pearson Correlation						.339**	.142	.277**	.455**	.248**
	Sig. (2-tailed)						.001	.121	.002	.001	.006
SWF	Pearson Correlation							.411**	.248**	.504**	.240**
	Sig. (2-tailed)							.001	.006	.001	.008
SWSA	Pearson Correlation								.260**	.400**	.311**
	Sig. (2-tailed)								.004	.001	.001
SWSO	Pearson Correlation									.384**	.100
	Sig. (2-tailed)									.001	.275
SWA	Pearson Correlation										.186*
	Sig. (2-tailed)										.043
SWGAS	Pearson Correlation										
	Sig. (2-tailed)										

\*= significant at the 0.05 level (2-tailed).\*\* = significant at the 0.001 level (2-tailed).

**V. DISCUSSION**

The data obtained from the statistical analysis as reported in the result session appear to show interesting findings about mentioned variables.

Table1 depicts the ‘t’ test showing significant difference in means for both males and females resulting in concluding that males are more externalized than females. The mean value for male is 11.133 and for female is 8.050. This finding is also supported by McLaughlin and Saccuzzo (1997) who found that gender effects were apparent with females showing a slight but significantly greater internal locus of control. In a study (Fatemeh Bahrami and Naser Yousefi, 2011) it was seen a higher rate of health anxiety and meta worry in girls than boys.

Table 2 shows the mean value for males is greater than females for Social worry, Worrisome concern, Financial concern, Social adequacy concern, Academic concern, and General Anxiety Symptom.

In a recent study of Isabelle van der Vegt and Bennett Kleinberg found that men were more occupied with effects on the economy and society. From the table 3 it can be said that gender has a significant effect on health worry, financial concern, significant others wellbeing concern, general anxiety symptom. Locus of control has a significant effect on meta worry. Table 3 also indicates a significant effect of the interaction between gender and locus of control on significant others wellbeing concern. Earlier findings say that girls reported more specific worries than boys and endorsed more physical symptoms than boys (Muris et al.1998). It is also seen that the Locus of control has a significant effect on Meta worry. From the above table it can be said that gender has a significant effect on health worry, financial concern, significant others wellbeing concern, general anxiety symptom. Locus of control has a significant effect on meta worry. Table 3 also indicates a significant effect of the interaction between gender and locus of control on significant others wellbeing concern.

Earlier it was also seen that females are more internalized than males which depicts that they cannot handle their normal worry and instead they worry about their worry which leads to meta worry. A cross-sectional

investigation by (Charles B. Powers, Patricia A. Wisocki, Susan Krauss Whitbourne, 1992) found that worry in the elderly was related to less favorable attitudes toward the future, and among college students worry was related to negative attitudes toward the present. For both age groups, an external locus of control was associated with higher worry scores. From table 3 it was also noted that there is a significant effect of Gender on financial concern. One possible explanation may be because of the higher expectation of society and parents from a male child to take care of his family, fulfilling all their demands led to more financial concern in males. From table 2 it was seen that females worry more about significant others wellbeing than males. From table 3 it was concluded that the interaction between gender and locus of control has a significant effect on significant others wellbeing concern. In a recent study of (Isabelle van der Vegt and Bennett Kleinberg) found that women worried more about their loved ones specially their children. Research into stress shows that women are more physically reactive to social rejection compared with men, for example. This means they are more likely to prioritize the needs of others over their own – and over time this can lead to resentment and feeling unfulfilled. In this study it was also seen that there is a significant effect of gender on general anxiety symptoms. In general, men tend to put off getting any kind of support, because they think they're supposed to be tough, self-reliant, and able to manage pain and take charge of situations. This can make it hard for men to acknowledge they have any health issues, let alone any that affect their social and emotional wellbeing.

Table 4 depicts Correlational study among the different variables. From the above result table, it can be depicted that Social worry (SW) has a significant positive relationship with HW, MW, SWW and SWGAS. Health worry (HW) has a significant positive relationship with MW, SWW, SWF, SWA and SWGAS. Meta worry (MW) has a significant positive relationship with SWGAS.

Worrisome thinking (SWW) has a significant positive relationship with SWF, SWSO, SWA and SWGAS. Financial concern (SWF) has a significant positive relationship with SWSA, SWSO, SWA and SWGAS. Social adequacy concern (SWSA) has a significant positive relationship with SWSO, SWA, SWGAS. Significant others wellbeing concern (SWSO) has a significant positive relationship with SWA. Academic concern (SWA) has a significant positive relationship with general anxiety symptoms (SWGAS).

## VI. IMPLICATIONS OF THE PRESENT STUDY

For over three decades, worry has been a fruitful concept in anxiety research. Worry is a thought activity characterized by a predominance of anxious predictors about possible future negative events (Borkovec, 1994). The concept of meta-worry was introduced as a salient feature of the metacognitive model of worry. Not much research has been conducted on meta worry. So, the present study aims to see whether a person's locus of control is related to meta worry. There is a stereotypical thought that women worry more than men in many aspects of life. The present study focused on gender difference for different domains of worry. It is important to understand when a person is called a worrier, when a worry becomes a pathological worry. It is important to know what causes worry and when does our worry leads to problems in our daily life functioning. Worry, Tension, Anxiety all three are separate concepts. So, it is important to understand worry which is a separate concept from meta worry.

## VII. REFERENCES

- Aamna Saleem Khan, Nasir Iqbra (Revised October 2013). Effects of Locus of Control on Gender: VFAST Transactions on Education and Social Sciences. Volume 4, Number 1, May-June 2014.
- Adrian Wells (2001). Further Tests of a Cognitive Model of Generalized Anxiety Disorder: Metacognitions and Worry in GAD, Panic Disorder, Social Phobia, Depression, and Non patients: Behaviour Therapy, 32, pp.85-102.
- Adrian Wells (2000). Anxious Thoughts Inventory (AnTI): Emotional Disorders and Meta cognition.
- Augustine Osman, Peter M. Gutierrez, William R. Downs (2001). Development And Psychometric Properties of The Student Worry Questionnaire-30, Psychological Reports, 88, pp.277-290.
- Introduction to the Special Issue on Pathological Worrying: Journal of Experimental Psychopathology, Volume 1, 2010.
- Carol D. Ryff and Corey Lee M. Keyes (1995). The Structure of Psychological well-being revisited: Journal of Personality and Social Psychology. Volume.69, No.4, pp .719-727.
- Sandra Hunt, Patricia Wisocki, Julianne Yanko (2003). Worry and use of coping strategies among older and younger adults: Journal of Anxiety Disorders, Volume 17, Issue 5, pp.547-560.
- Michel Hersen (2007). Journal of Anxiety Disorders. Volume 21, Issue 8.
- Michelle G. Newman, Sandra J. Llera (April 2011). A novel theory of experiential avoidance in generalized anxiety disorder: A review and synthesis of research supporting a contrast avoidance model of worry: Clinical Psychology Review, (Volume.31, issue 3) pp. 371-382.



- Performance among United Arab Emirates University Students: Horizons in Humanities and Social Sciences, An International Refereed Journal.
- Charles B.Powers, B.A. Patrica, A. Wisocki, S. k. Whitbourne,(1992).Age differences and correlates of worrying in young and elderly adults.
- Goldberg (1978). General Health Questionnaire – 28 (GHQ-28), uploaded by Michele Sterling 08 August 2014.
- <https://www.theatlantic.com/health/archive/2014/03/...increasingly...boys/283897>.
- Helen Startup, Daniel Freeman, Philippa A. Garety (March 2007). Persecutory delusions and catastrophic worry in psychosis: Developing the understanding of delusion distress and persistence: Behaviour Research and Therapy, Volume 45, Issue 3, pp. 523-537.
- Manger T, Eikeland OJ (September 2000). On the relationship between locus of control, level of ability and gender, Volume 41, Issue 3, pp. 225-229.
- Nigar G. Khawaja and Janette McMahon (2011). The relationship of meta-worry and intolerance of uncertainty with pathological worry, anxiety, and depression: Behaviour Change, 28(4), pp. 165-180.
- T. D. Borkovec, William J. Ray and Joachim Stober (1998). Worry: A Cognitive Phenomenon Intimately Linked to Affective, Physiological, and Interpersonal Behavioral Processes: Cognitive Therapy and Research, Vol. 22, No. 6, pp. 561-576.
- Janet A. Carter, Doctor of Philosophy (2010). Worry and Rumination: Measurement Invariance Across Gender.
- Manger T, Eikeland OJ (September 2000). On the relationship between locus of control, level of ability and gender, Volume 41, Issue 3, pp. 225-229.
- Marco Roberto Mentuccia (August 2011). Cognitive Predictors of Worry in An Adolescent Community Sample.