Development and Validation of Workplace Anxiety Questionnaire

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Abstract: **The current COVID-19 pandemic has enormous repercussions for world economies. Workplace environments have been negatively impacted as a direct fallout of the crisis. Countless people are losing jobs every day, while the rest live in fear of that happening. Such a scenario increases anxieties in the workplace that cause numerous problems in the present, as well as future performance and well-being of the employees. First step towards a solution is identifying and acknowledging that a problem exists. The Workplace Anxiety Questionnaire was developed to identify employees with high levels of anxieties in the workplace. The questions are designed specifically keeping in mind the workplace and its associated apprehensions for the employee. Responses were collected from 100 employees of organizations in Delhi NCR region. The questionnaire yielded adequate reliability and validity. Scope of the Questionnaire, as well as possible contributions are discussed. Remedial steps are also mentioned which may help in reducing anxiety in employees. The questionnaire is a step toward actively engaging the workforce and ensuring a healthy workplace environment which allows few anxieties to fester.**

Keywords: **Covid-19, workplace, anxiety, reliability, validity, development.**

I. INTRODUCTION

The World in 2020 is going through an unprecedented crisis. Covid-19 pandemic has led to over 740,000 deaths and surpassed 20 million cases all over the globe (WHO Coronavirus Disease (COVID-19) Dashboard). Health concerns are primary but not the only issue at hand. Threat to and loss of life is accompanied by economic distress for nations worldwide. According to the World Bank, most economies will plunge into recession in 2020 as a direct result of this pandemic (The Global Economic Outlook During the COVID-19 Pandemic: A Changed World, 2020). Situation back home mirrors the scenario elsewhere as the Reserve Bank of India (RBI) Governor has said that the Indian Economy will contract in 2021 (RBI says India GDP will contract in FY21, cuts repo rate by 40 bps to 4%, 2020). Countless businesses have failed or are failing and millions have lost jobs or live in fear of that happening. International Labour Organization (ILO) estimates 25 million people worldwide to face unemployment and loss of about USD 3.4 Trillion in workers' income(COVID-19 has exposed the fragility of our economies, 2020). Times like these are trying and troublesome for all which may make workplaces feel like melting pots of anxieties and fears. It is important that the workplace not only acknowledge the concerns of employees but also attempt to alleviate them. The Workplace Anxiety Questionnaire has been developed for that purpose as none other exists to measure Workplace Anxiety at present. Studies done in the past have highlighted the need for a Workplace Anxiety scale that helps in identifying problem areas so a step towards betterment can be taken. Unresolved career anxiety has been seen to make individuals less career committed, less satisfied and generally failing to contribute to society despite all their knowledge, skills and education. (Daniels et al, 2011) Anxiety was found to impair sound decision-making ability (Fouad,2007).Weinstein, Healey and Ender (2002) reasoned that this happens because anxiety keeps us away from behaviorsthat can be potentially helpful in making sound career decisions like gathering more information or seeking career counselling. This finding is supported by various studies that link career indecision and career-related anxiety. (Fuqua, Newman, Seaworth, 1988; Leong &Chervinko 1996; Newman, Fuqua &Minger, 1990 ; Saunders, Peterson, Sampson & Reardon, 2000 ; Wanberg and Muchinsky, 1992) Santos and Coimbra (2000) found career indecision to be associated with limited career exploration.

Thus, anxiety in the workplace negatively impacts not only performance at present but also in the future. According to Pekrun (2006) Anxiety is " a perceived inability to predict, control or obtain desired results or outcomes" thus in a way it is by default an absence of control. Weinstein et al., (2002) found negative association between career-anxiety and perceived control. Daniels, Clifton, Perry, Mandzuk and Hall (2011) found students who felt able to exert influence or control at university were also less likely to experience career anxiety or indecision and were even more actively involved and enthusiastic towards academics in general. They also felt positive about own abilities to achieve goals.It can thus be said, that lack of perceived control in the surroundings may lead to anxiety which affects pursuit of goals and achievement orientation. Whereas a lack of anxiety is also linked with positive outcomes professionally. Daniels et al., (2006) found anxiety to have adverse effects on competence and certainty. As we have seen when these anxieties are present in the workplace, they can have a variety of negative effects spanning over a long period of time. Keeping in mind the negative impact of anxiety and its associated variables, the present Questionnaire has been developed to identify its existence in employees. An advantage of the Workplace Anxiety Questionnaire is that unlike other career and job anxiety questionnaires, it is not specific to any particular profession and spans over the workplace environment in general as a whole and not just with respect to either just career or the job in question. As a result, it has a wide scope and can be employed in various scenarios to seek out presence of Workplace Anxiety in employees. The Workplace Anxiety Questionnaire covers aspect of the job, career and workplace in general. Thus, it is able to identify problem areas and covers the employment aspect as a whole. Questions have been designed to not just focus on a single aspect but cover the workplace environment in its totality, including elements designed to assess how the participant feels about decisions taken in the past with respect to career, the current environment of the workplace and the direction they see it heading towards.

II. METHODOLOGY

Participants:

Responses were collected from 100 employees (57 male and 43 female) from Delhi NCR region using purposive sampling. The participants were within the age range of 23 to 48 years. Education qualification of the participants varied from graduation to post graduation. Their socio-economic background ranged from lower to upper middle class. Before obtaining consent, participants were informed about the purpose of the study. No particular time limit was set to complete the questionnaire, but the participants were asked to complete the measures as fast as possible.

Procedure:

Construction of the questionnaire:

The construction of the Workplace Anxiety questionnaire initially started by devising 18 items which were centered on anxiety relating to work. 4 items from the questionnaire were dropped due to low face validity. Remaining 14 items in the questionnaire were administered in a pilot study comprising of a sample of 20 participants. The results were then statistically analyzed and 4 more items were dropped due the low item-total correlation. Remaining 10 items were retained in the study and these items were included in the final version of the questionnaire. No certain time limit was assigned to complete the questionnaire.

Measures:

Development of Workplace Anxiety questionnaire:

This self-report questionnaire included 10 items from the initial 18 items. The items have been stated in the first person. The participants are asked to rate if they faced certain situations on a 5-point Likert Scale-'Strongly disagree', 'Disagree', 'Neutral', 'Agree' and 'Strongly agree'. The higher the scores on the questionnaire, the higher is the workplace related anxiety in an individual.

Perceived Stress Scale (PSS-10):

Perceived Stress Scale, devised by Cohen and Williamson (1988), measures stress level in an individual. High scores on this scale represent high stress levels. The scale yields high Item-total reliability for 10 item scale (0.79) along with good convergent and divergent validity (Smith, Rosenberg& Haight, 2014).

Positive Affect Scale:

Items relating to Positive Affect from PANAS Scale by Watson, Clark, and Tellegen (1988) were used. High scores represent high positive affect. Cronbach Coefficients of Positive Affect ranged from 0.86 to 0.90. The scale also shows appropriate convergent and divergent validity (Watson, Clark &Tellegen, 1988).

Minnesota Satisfaction Questionnaire (MSQ):

Minnesota Satisfaction Questionnaire was used to assess the level of job satisfaction among the employees. The reliability of the questionnaire was found to be ranging from 0.87 (assemblers) to 0.92 (engineers) (Weiss, Dawis, England &Lofquist, 1967).

Analysis:

The collected data were then further analyzed using appropriate statistical techniques in order to yield reliability and validity of the questionnaire using SPSS.

II. RESULT

Descriptive Statistics:

Mean of entire 10 items was found to be 3.002 and total standard deviation of 10 items was 0.245. Mean and standard deviation of each item is presented in Table 1. Mean ranged from 2.68 (7th item) to 3.44 (2nd item) whereas standard deviation ranged from 1.043 (7th item) to 1.378 (3rd item).

Table 1: DESCRIPTIVE STATISTICS ITEM-WISE

S.No	Item	Mean	Standard Deviation
1	I feel stagnated at my job.	3.210	1.289
2	I feel frustrated as my ambitions and potential is not being utilized.	3.440	1.175
3	I am constantly worrying about my finances.	3.020	1.378
4	I fear losing my job.	2.750	1.132
5	I lack alternative options in my career.	3.180	1.242
6	I feel threatened by others in the workplace.	2.690	1.107
7	I regret the choices I made with respect to my career.	2.680	1.043
8	I am unhappy with the direction my career has taken.	2.950	1.140
9	My hard work is not appreciated in my workplace.	3.070	1.103
10	I have trouble sleeping because of unwanted thoughts about my career.	3.030	1.218

Reliability Analysis:

Reliability as an internal consistency was analyzed using Cronbach's Alpha which is known to be an extremely important tool for research purposes especially one that involve construction of a test (Cortina, 1993). It is considered as 'the mean of all possible split-half coefficients, corrected by the Spearman-Brown formula' (Gregory, 2017, p. 83). The acceptable value of Cronbach's Alpha ranges from 0.70 to 0.95 (Tavakol, &Dennick, 2011). The Cronbach's Alpha value of this questionnaire was found to be 0.826 which is well within the acceptable range. Therefore, the questionnaire seems to possess good internal consistency.

Guttman's reliability, presented in Table 2, is based upon the split-half method and generates a higher value as compared to Cronbach's Alpha.

Table 2: CRONBACH'S ALPHA UNSTANDARDIZED, STANDARDIZED AND GUTTMAN'S RELIABILITY

Total Items	Cronbach's Alpha (Unstandardized)	Cronbach's Alpha (Standardized)	Guttman's Reliability λ6
10	0.826	0.828	0.848

Item-rest correlation represents the correlation of a particular item with the total of the rest of the item scores in a questionnaire. If the correlation of a particular item with the sum of rest of the item score is low, then that item can bedropped. 'Cronbach's Alpha if item dropped' represents the reliability if that particular item was removed from the questionnaire. Item-rest correlation and Cronbach's Alpha if item dropped is presented in Table 3 for each item in the questionnaire.

Table 3: ITEM-REST CORRELATION AND CRONBACH'S ALPHA IF ITEM DROPPED

S.No	Item	Item-Rest Correlation	Cronbach's Alpha If Item Dropped
1	I feel stagnated at my job.	0.539	0.807
2	I feel frustrated as my ambitions and potential is not being utilized.	0.489	0.812
3	I am constantly worrying about my finances.	0.555	0.806
4	I fear losing my job.	0.589	0.802
5	I lack alternative options in my career.	0.296	0.832
6	I feel threatened by others in the workplace.	0.549	0.807
7	I regret the choices I made with respect to my career.	0.578	0.804
8	I am unhappy with the direction my career has taken.	0.444	0.817
9	My hard work is not appreciated in my workplace.	0.568	0.805
10	I have trouble sleeping because of unwanted thoughts about my career.	0.542	0.807

All the 10 items were retained as dropping an item would not have created any major difference in the reliability of the questionnaire.

Validity Analysis:

Content Validity:

Content validity of the Workplace Anxiety Questionnaire was analyzed by consulting 2 specialists of the same field.

Construct Validity:

Construct validity is used in a situation where the interpretation of a measure is done on the basis of some attribute or quality, for which, there is no 'operational definition' (Cronbach &Meehl, 1955). One of the subcategories of construct validity is convergent validity-constructs which are theoretically related to each other should showcase high correlation.

Convergent validity of the questionnaire was performed by correlating the Workplace Anxiety Questionnaire with Perceived stress scale (0.751, $p < .001$), Positive Affect (-0.742, $p < .001$) and Job Satisfaction (-0.712, $p < .001$). These high and significant correlations give the evidence of convergent validity of the Workplace Anxiety Questionnaire.

IV. DISCUSSION

The Workplace Anxiety Questionnaire yielded high internal consistency. Value of Cronbach's Alpha coefficient was 0.826 and 0.828 (unstandardized and standardized respectively). Guttman's reliability value was found to be 0.848. The questionnaire also possesses content and convergent validity. The Questionnaire can be a useful tool for identifying workplace anxiety and preventing its associated negative impact. Career counselling can be considered to remedy the situation and provide specialized help. As indecision, absence of motivation, active goal-pursuit, lack of perceived control have been associated with anxiety. (Fouad, 2007; Daniels et al., 2011; Weinstein et al., 2002) The branches can be treated to treat the root cause as well. Indecision can be managed by providing information for specific decisions to be taken, incentives can be given to increase motivation and a degree of decision-making power can be gradually given to increase perceived control. Employees can also be asked for their opinion on crucial matters to increase their perceived control in the workplace. Thus, the questionnaire can be a positive first step towards identifying and potentially dealing with the inevitable fallout of the COVID-19 pandemic in the workplace. It is important that organizations recognize that it is not only the already laid-off workforce that suffers, but even the one currently employed may feel an impending doom due to the situation. It is important that these anxieties are acknowledged, identified and appropriately addressed to maintain a healthy workplace environment.

REFERENCES

[1] Cohen S, Williamson G: Perceived stress in a probability sample of the United States. The Social Psychology of Health. Edited by: Spacapam S, Oskamp S. 1988, Sage Publications Newbury Park: CA

[2] Cortina, J. M. (1993). What is coefficient alpha? An examination of theory and applications. *Journal of Applied Psychology, 78*(1), 98–104.

[3] COVID-19 has exposed the fragility of our economies. (2020, March, 27). Retrieved from https://www.ilo.org/global/about-the-ilo/newsroom/news/WCMS_739961/lang--en/index.htm

[4] Cronbach, L. J., &Meehl, P. E. (1955). Construct validity in psychological tests. *Psychological bulletin*, *52*(4), 281.

[5] Daniels, L. M., Clifton, R. A., Perry, R. P., Mandzuk, D., & Hall, N. C. (2006). Student teachers'competence and career certainty: The effects of career anxiety and perceived control.SocialPsychology of Education, 9, 405–423. doi:10.1007/s11218-006-9000-0.

[6] Daniels, L. M., Stewart, T. L., Stupnisky, R. H., Perry, R. P., &LoVerso, T. (2011). Relieving career anxiety and indecision: The role of undergraduate students' perceived control and faculty affiliations. *Social Psychology of Education*, *14*(3), 409-426.

[7] Fouad, N. A. (2007). Work and vocational psychology: Theory, research, and applications.AnnualReview of Psychology, 58, 543–564. doi:10.1146/annurev.psych.58.110405.085713.

[8] Fuqua, D. R., Newman, J. L., & Seaworth, T. B. (1988). Relation of state and trait anxiety to differentcomponents of career indecision.Journal of Counseling Psychology, 35, 154–158. doi:10.1037/0022-0167.35.2.154.

[9] Gregory, R. J. (7th Ed.). (2017). *Psychological Testing: History, Principles, and Applications.* Pearson Education.

[10] Leong, F. T. L., &Chervinko, S. (1996). Construct validity of career indecision: Negative personalitytraits as predictors of career indecision.Journal of Career Assessment, 4, 315–329. doi:10.1177/106907279600400306.

[11] Newman, J., Fuqua, D., &Minger, C. (1990). Further evidence for the use of career subtypes in definingcareerstatus.Career Development Quarterly, 39, 178–188.

[12] Pekrun, R. (2006). The control-value theory of achievement emotions: Assumptions, corollaries, and impli-cations for educational research and practice.Educational Psychology Review, 18, 315–341. doi:10.1007/s10648-006-9029-9.

[13] RBI says India GDP will contract in FY21, cuts repo rate by 40 bps to 4%. (2020, May, 22). Reterieved from https://www.google.co.in/amp/s/wap.business-standard.com/article-amp/finance/rbi-advances-mpc-meeting-cuts-policy-repo-rate-by-40-bps-shaktikanta-das-120052200306_1.html

[14] Santos, P. J., & Coimbra, J. L. (2000). Psychological separation and dimensions of career indecision insecondary school students.Journal of Vocational Behavior, 56, 346–362. doi:10.1006/jvbe.2000.1719.

[15] Saunders, D. E., Peterson, G. W., Sampson, J. P., & Reardon, R. D. (2000). Relation of depression and dys-functional career thinking to career indecision.Journal of Vocational Behavior, 56, 288–298. doi:10.1006/jvbe.1999.1715.

[16] Smith, K. J., Rosenberg, D. L., & Timothy Haight, G. (2014). An Assessment of the Psychometric Properties of the Perceived Stress Scale-10 (PSS 10) with Business and Accounting Students. *Accounting Perspectives*, *13*(1), 29-59.

[17] Tavakol, M., &Dennick, R. (2011). Making sense of Cronbach's alpha. *International journal of medical education*, *2*, 53.

[18] The Global Economic Outlook During the COVID-19 Pandemic: A Changed World. (2020, June, 8). Reterieved from https://www.worldbank.org/en/news/feature/2020/06/08/the-global-economic-outlook-during-the-covid-19-pandemic-a-changed-world

[19] Wanberg, C. R., &Muchinsky, P. M. (1992). A typology of career decision status: Validity extensionof the vocational decision status modes.Journal of Counseling Psychology, 39, 71–80

[20] Watson, D., Clark, L. A., &Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: the PANAS scales. Journal of personality and social psychology, 54(6), 1063.

[21] Weinstein, F. M., Healy, C. C., & Ender, P. B. (2002). Career choice anxiety, coping, and perceivedcontrol.The Career Development Quarterly, 50, 339–349.

[22] Weiss, D. J., Dawis, R. V., England, G. W., &Lofquist, L. H. (1967). Manual for the Minnesota Satisfaction Questionnaire. Minneapolis, MN: University of Minnesota

[23] WHO Coronavirus Disease (COVID-19) Dashboard. Reterieved August 13, 2020, from https://covid19.who.int/

WORKPLACE ANXIETY QUESTIONNAIRE

S.No.	Item	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1	I feel stagnated at my job.	1	2	3	4	5
2	I feel frustrated as my ambitions and potential is not being utilized.	1	2	3	4	5
3	I am constantly worrying about my finances.	1	2	3	4	5
4	I fear losing my job.	1	2	3	4	5
5	I lack alternative options in my career.	1	2	3	4	5
6	I feel threatened by others in the workplace.	1	2	3	4	5
7	I regret the choices I made with respect to my career.	1	2	3	4	5
8	I am unhappy with the direction my career has taken.	1	2	3	4	5
9	My hard work is not appreciated in my workplace.	1	2	3	4	5
10	I have trouble sleeping because of unwanted thoughts about my career.	1	2	3	4	5