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Research Paper

Relationship between Self-Efficacy and the Levels of Worry among the Adults

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ABSTRACT

The main aim of this study is to understand the trait of worry and apprehension in adults, and the level of self-efficacy that the individual has at that stage. This study also examines the relation of worry to problematic phone usage in adults. Several studies have demonstrated that overuse of modern-day technologies may have a negative impact on physical health, which includes inducing headache, concentration difficulties, pain, fatigue, reduction in the amount of physical activity, and indirect injuries which include accidents affecting pedestrians or drivers. This Research study hold the analysis of relationship between worry and self-efficacy, and to understand in what way are they correlated. It also understands the harmful use of mobile phones, and how it is related to worry. Self-efficacy, a construct grounded in social cognitive theory, can be normally defined as personal beliefs in one's abilities. Self-efficacy beliefs determine how people feel, think, motivate themselves and behave. Such ideals produce these various effects through 4 primary processes. They consist of cognitive, motivational, affective and selection processes. They were given three questionnaires- Penn State Worry Questionnaire (Meyer et al., 1990), General Self-efficacy Scale (Ralf Schwarzer and Matthias Jerusalem, 1979), Mobile Phone Problem Use Scale (Bianchi and Phillips, 2005). Proper instructions were provided to the participants. They were also assured confidentiality of their information and responses would be maintained. The data was collected in an online mode, and the responses were recorded using a Google form. The expectation from this research is, 'There is a negative correlation between self-efficacy and worry among adults'; and 'There is a positive correlation between smart phone usage and worry'.

Keywords: *Worry, Self-efficacy, Personal Belief, Aim*

Worry is a very common condition that is observed in people of all age groups. It can be caused by a physical condition, mental condition and effects of drugs or due to a combination of these. It is contributed by various external factors.

The 21st century is characterized by way of important development of contemporary technologies and a developing variety of users of those technologies. The use of recent technologies which includes the internet, mobile phones, or smartphones certainly has a

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wide variety of useful effects. however, overuse may be associated with dangerous and problematic behaviours. Several studies have demonstrated that overuse of modern-day technologies may have a negative impact on physical health, which includes inducing headache, concentration difficulties, pain, fatigue, reduction in the amount of physical activity, and indirect injuries which include accidents affecting pedestrians or drivers. Furthermore, excessive mobile phone use has been associated to sleep disturbances, signs of depression, anxiety, worse academic overall performance, or dissatisfaction with life.

Self-efficacy, a construct grounded in social cognitive theory, can be normally defined as personal beliefs in one's abilities. Self-efficacy beliefs determine how people feel, think, motivate themselves and behave. Such ideals produce these various effects through 4 primary processes. They consist of cognitive, motivational, affective and selection processes (Bandura, 1994). A strong sense of efficacy enhances human accomplishment and personal well-being in many methods. Such an efficacious outlook produces personal accomplishments, reduces stress and lowers vulnerability to depression. In contrast, people who doubt their abilities shy away from difficult tasks which they view as personal threats. they have low aspirations and weak commitment to the goals they choose to pursue. They fall easy victim to stress and depression. (Bandura A, Pastorelli C, Barbaranelli C, Caprara GV, 1999). On the other hand, youth has been described as an important period to gather social competences required for adult life. It has been suggested that early stressful experiences may be related with the development of psychopathologies together with melancholy and social tension in adulthood (Bandura A, Pastorelli C, Barbaranelli C, Caprara GV, 1999). Particularly, researchers have claimed that effective mood impairs because happy (vs. sad) people prefer activities that prolong the search for advantageous mood & much fewer depressive signs and symptoms. In step with the research results of perceived social and educational inefficacy of children contributed to concurrent and subsequent depression both directly and through their impact on academic achievement, pro-socialness, and problem behaviours. (Isen AM, Simmonds S., 1978)

However, worry can also be related to the use of mobile phones in our life. Mobile phones have over only a few decades revolutionized how we communicate, interact, search for information, work, do chores, and pass time. The development of the smartphone with its multitude of functions and features, increased memory capacity and speed, and constant connectedness to the internet, has extended the time spent using the phone, implying a near ubiquitous utilization. This fast development with changed exposure patterns has raised questions about ability health consequences of the publicity (2018). The mobile phone communicates through emission of radio signals, and the exposure to radiofrequency electromagnetic fields has been proposed to be a health risk. There are nowadays few symptoms that radiofrequency electromagnetic fields associated with mobile phones have any most important health effects (2018).

A section in of the research papers presents summaries and examples of the main findings. The results have been clustered into 3 sections- frequency/duration of mobile phone use and mental health outcomes; bedtime mobile phone use, and; problematic mobile phone use. The main findings of each section are summarized and explains the psychological factors that were most commonly associated with mobile phone use (in all the aspects).

LITERATURE REVIEW

J Zhejiang Univ Sci B. (2009) worked on the Penn State Worry Questionnaire (PSWQ), and stated that it is a measure of anxiety events and has been shown to be effective in

multicultural populations. This study investigated the factor structure and psychometric characteristics of the Chinese version of PSWQ (ChPSWQ) in a sample of Chinese universities (n = 1243). ChPSWQ's exploratory factor analysis showed two factor solutions (with and without worry). Confirmatory factor analysis and model comparison confirmed that a single factor model with a method effect was the best fit for the data. ChPSWQ and its factors showed excellent internal consistency, convergent validity, and discriminant validity. This study supports the notion that the second factor, PSWQ, may reflect other traits as well as include pathological anxiety factors.

T.J. Meyer M.L. Miller R.L. Metzger Thomas D. Borkovec (2002) worked on a report and described the development of the Penn State Worry Questionnaire to measure the trait of worry. The 16-item instrument emerged from factor analysis of a large number of items and was found to possess high internal consistency and good test-retest reliability. The questionnaire correlates predictably with several psychological measures reasonably related to worry, and does not correlate with other measures more remote to the construct. Responses to the questionnaire are not influenced by social desirability. The measure was found to significantly discriminate college samples – (a) who met all, some, or none of the DSM IIIR diagnostic criteria for generalized anxiety disorder, and (b) who met criteria for GAD vs post-traumatic stress disorder. Of the 34 clinical subjects diagnosed with GAD, the anxiety questionnaire was found to be uncorrelated with other measures of anxiety or depression, indicating that highly anxious individuals and using an independent construct, desensitization combined with cognitive therapy did not correlate with anxiety. Measure over non-directive treatment.

Stella van Rijsoort, Paul Emmelkamp, Geert Vervaeke (1999) conducted an observational study, the psychometric properties of the PSWQ and the WDQ were investigated in a community sample. The PSWQ proved to be unidimensional even though the results indicated that the negatively keyed items contributed much less to the overall factor. internal reliability of the PSWQ became nice. Confirmatory evaluation of the WDQ indicated that a few alternations with reference to the content of the different domain names had to be made. moreover, a further health worry domain become covered in the scale. This resulted in a revised revision of the WDQ. internal reliability of the WDQ-R was great, as well as consistencies of the one-of-a-kind domains, with the exception of the work Incompetence domain. excessive to moderate correlations had been found among the two worry scales and measures of trait anxiety, depression and obsessive-compulsive behaviour. In studying the relative impact of these constructs on worry it become determined that the predictors accounted for 62% and 61% of the variance in the PSWQ and the WDQ-R respectively, offering in addition evidence for the separate construct of worry.

Katherine V. Wild Nora C. Mattek Shoshana A. Maxwell Hiroko H. Dodge Holly B. Jimison Jeffrey A. Kayeabd (2012) conducted a study that examines variations in computer-associated self-efficacy and anxiety in subgroups of older adults, and changes in the one's measures after exposure to a systematic training program and subsequent computer use. participants were volunteers in the intelligent systems for evaluation of aging changes study (ISAAC) carried out via the Oregon centre for aging and technology. participants were administered two questionnaires before training and again 1 year later, which were related to computer self-efficacy and anxiety. continuous recording of computer use was also assessed for a subset of participants. Baseline comparisons by gender, age, education, living arrangement, and computer proficiency, but not cognitive status, yielded considerable differences in confidence and tension associated with particular aspects of computer use. At

1-year comply with-up, participants stated less anxiety and greater self-belief and confidence. however, the benefits of training and exposure varied by group and task. Comparisons based on cognitive status showed that the cognitively intact participants benefited more from training and/or experience with computer systems than did participants with mild cognitive impairment (MCI), who after 1 year continued to report much less confidence and greater anxiety regarding sure aspects of computer use.

METHODOLOGY

Sample

The sample comprised of a hundred participants (sixty-two female and thirty-eight male) of age range 22-60 years, through non-probability sampling method. This is quantitative research. In non-probability sampling method, each and every member of the population has equal chance of being selected and purposive sampling, also known as judgemental or selective sampling is also a kind of non- probability sampling in which the researchers fully rely on their own judgements and decisions when it comes to choosing individuals to take part in the study.

Measuring Instruments

Three measures were used in this study,

- **Penn State Worry Questionnaire (PSWQ)** – PSWQ is one of the most widely used questionnaires. It is a 16-item self-report questionnaire used to measure the trait of worry in adults. It was developed by Meyer et al. (1990). This was designed to study and capture the common, excessiveness, and uncontrollability of levels of pathological worry and apprehension. In this questionnaire, items are rated with the help of Likert scale, on a scale 0 to 4 which states the following interpretation: 0 - Not at all typical, 1 - Not very typical, 2 - Somewhat typical, 3 - Fairly Typical, 4 - Very typical. Items– 1, 3, 8, 10, 11 have reverse scoring as they are positive statements.
- **General Self-efficacy Scale (GSE)** – GSE is a 10-item psychometric scale that is designed to assess and evaluate optimistic self-beliefs to cope with variety of difficult demands of life, and their ability to cope with challenges and setbacks. It was developed by Ralf Schwarzer and Matthias Jerusalem (1979). It is correlated to emotions, optimism, and work satisfaction. In this scale, the responses are recorded with the help of 4-point Likert scale, stating – not all true, hardly true, moderately true, and extremely true.
- **Mobile Phone Problem Use Scale (MPPUS – 10)** – MPPUS – 10 is a 10-item scale rated using Likert scale, where 1 (Not at all true) to 10 (Extremely True). It was developed by Bianchi and Phillips (2005). With the help of this questionnaire, it would assess problematic mobile phone use. This questionnaire includes questions regarding socio-demographic variables and structured scales to assess activities on the internet and mobile phone and substance use.

Hypotheses

- There is a negative correlation between self-efficacy and worry among adults.
- There is a positive correlation between smart phone usage and worry.

Procedure

The study was conducted on the 100 participants They were given three questionnaires- Penn State Worry Questionnaire (Meyer et al., 1990), General Self-efficacy Scale (Ralf Schwarzer and Matthias Jerusalem, 1979), Mobile Phone Problem Use Scale (Bianchi and

Phillips, 2005). Proper instructions were provided to the participants. They were also assured confidentiality of their information and responses would be maintained. The data was collected in an online mode, and the responses were recorded using a Google form. The participants took around 13-14 mins to complete the process of data collection. They were then thanked and appreciated for their cooperative participation.

RESULTS

Questionnaires	Mean	Standard Deviation
PSWQ	48.7	8.01
GSE	26.01	6.77
MPPUS - 10	47.09	19.19

Table 1, shows the Descriptive Statistics i.e., Mean and Standard Deviation of the three measures which are, PSWQ, GSE, and MPPUS – 10 respectively. It can be seen that the mean and standard deviation for the PSWQ scale is 48.7 and 8.01; for the GSE scale is 26.01 and 6.77; and for the MPPUS – 10 is 47.09 and 19.19.

Variables	PSWQ
PSWQ	1
GSE	0.396
MPPUS - 10	0.361

Table 2, analyses the correlational between self-efficacy and worry, and mobile phone use and worry. It can be seen that the correlation of self-efficacy to worry is 0.396, and mobile phone use to worry is 0.361.

DISCUSSION

As there were a hundred participants of age range 22-60 years took part in this research study, and the sample was collected using non-probability sampling method. They were given three questionnaires- Penn State Worry Questionnaire (Meyer et al., 1990), General Self-efficacy Scale (Ralf Schwarzer and Matthias Jerusalem, 1979), Mobile Phone Problem Use Scale (Bianchi and Phillips, 2005) with proper instructions. The Result analysis was done through calculating each score of individuals, totalling them, finding the descriptive statistics (that involves Mean and Standard Deviation). Then the correlation of scores of PSWQ and GSE, then PSWQ and MPPUS-10 was calculated. The above analysis was done in the Microsoft Excel sheet.

It was found that, the Hypothesis - There is a negative correlation between self-efficacy and worry among adults is proved false, because the correlation states that it is positive. Hence, the hypothesis is rejected.

However, stating the analysis of the subject's scores, it can be said in a way that, the participant is 'worried' in a positive way. As we all know that Eustress makes a person work order to achieve the goals, hence, it can at times increase the self-efficacy.

This can be stated with the theory - Vroom's Expectancy theory was proposed by Victor. H. Vroom, who believed that people are motivated to perform activities to gain some purpose to the extent they expect that certain actions on their part would help them to attain the goal.

Vroom's Expectancy theory is primarily based on the assumption that an individual's behaviour results from the choices made by him with respect to the alternative course of action, which is related to the psychological events occurring simultaneously with the behaviour. this means an individual selects a certain behaviour over the other behaviours with an expectation of getting results, the one desired for.

Therefore, Vroom's Expectancy theory has its roots in the cognitive concept, i.e., how an individual processes the different elements of motivation. This theory is built around the concept of valence, instrumentality, and Expectancy and, therefore, is often called as VIE theory.

Secondly, the Hypothesis - <u>There is a positive correlation between smart phone usage and worry</u> is proved true as the correlation states that it is positive. Hence, the hypothesis is true. As we know that smartphone use can be difficult for adults so it can cause worry as well. It also can state that these days smartphone addiction and problem use, also is seen in adults. It can cause a sense of tension of missing calls.

CONCLUSION

This Research study was conducted to understand the trait of worry and apprehension in adults, and the level of self-efficacy that the individual has at that stage. This study also involves the relation of worry to problematic phone usage in adults.

This is quantitative research. It was conducted using non-probability sampling method, and it was conducted on 100 participants (62 Female and 38 Male). They were given three questionnaires- Penn State Worry Questionnaire (Meyer et al., 1990), General Self-efficacy Scale (Ralf Schwarzer and Matthias Jerusalem, 1979), Mobile Phone Problem Use Scale (Bianchi and Phillips, 2005).

However, coming to the hypotheses and results, it was found that, the Hypothesis – 'There is a negative correlation between self-efficacy and worry among adults' is proved false, because the correlation states that it is positive. Hence, the hypothesis is rejected. The Hypothesis – 'There is a positive correlation between smart phone usage and worry' is proved true as the correlation states that it has a positive correlation between the two variables. Hence, the hypothesis is true.

However, stating some limitations of the study,
- The mode of data collection was online; and self-report measures were used for collecting data. This might result in possibility of subjective biasness. Therefore, few participants had faced few problems in giving the response as they were uncomfortable/unfamiliar with the whole process.
- There was limited sample size. As in a detailed research study, many participants do not give valid responses, which in a result affects the descriptive statics and correlation of the variables.
- There was limited access to data, as worry being a single variable is very compact in nature, and as a result, it was difficult to find levels of worry.

Overall, there is an extensive scope in future for this research study. As per the findings in this study, we have found that, there is a positive correlation between smart phone usage and worry, and there is a positive correlation between self-efficacy and worry. Still, this study

can be further explored in the future if the implementation can be done, keeping in mind or considering the problems of the participants as much as we can, since we have already seen in the limitations that not all participants, who had participated in giving the response, were comfortable in the online mode of data collection. Furthermore, one of the major criteria for the future researches is, to understand the objective and background research. Knowing the levels of worry and working on it individually is something that can focused ahead. It is also important to know and choose the most suitable research methods, understanding the Study Design and Statistical Analysis.

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