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Locus of Control and Psychological Distress among Working Women During the COVID-19 Pandemic

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Abstract

Introduction: The aim of the present study was to investigate relationship between locus of control and psychological distress among working women during the COVID-19 pandemic**.**
Method: A mixed method study was conducted among 81 working women in Bangalore identified through convenient and purposive sampling. In Phase 1, Levenson's Locus of control Scale and Kessler Psychological Distress Scale were administered to measure the locus of control orientation and the level of psychological distress. In Phase 2, interviews were conducted based on open ended questions developed by the researchers to understand the perception of the impact of the COVID-19 pandemic on personal and professional life.
Results: Pearson's product moment correlation was used for Phase 1 and thematic and content analysis for Phase 2. The findings from Phase 1 revealed a moderate negative correlation between internal locus of control and psychological distress, and a weak negative correlation between external locus of control and psychological distress. The thematic analysis showed the variations in the perceptions of the impact of the COVID-19 on the personal and professional lives and the adaptable nature of women.
Conclusion: The present study helps to understand whether a relationship exists between locus of control orientation and psychological distress during the time of COVID-19 and reflects on the how the COVID-19 has affected the personal and professional lives of working women.

Keywords: COVID-19, Internal-External Control, Psychological Distress, Women, Working

Introduction

Beginning in China in December 2019, the COVID-19 outbreak has subsequently spread to the majority of the world's nations. On March 11, 2020, the World Health Organization (WHO) declared COVID-19 to be a pandemic. The virus had collapsed global economies, bringing the entire planet to its knees. Three-fourths of the world's population was forced or commanded to stay at home as travel was suspended, lockdowns, and social isolation had paralyzed major cities.

On January 30, 2020, three Indian medical students who had just returned from Wuhan, the pandemic's epicentre, were found to have the first instances of COVID-19 in India [1]. Lockdowns were announced on March 23 in Kerala and on March 25, 2020 in the rest of the nation. Over 90,000 cases per day were reported at peak levels in the middle of September 2020; by January 2021, that number had fallen to under 15,000 [2]. A second wave that started in March 2021 was far more destructive than the first, and regions of the country experienced shortages of vaccines, hospital beds, oxygen cylinders, and other medical supplies [2]. India was the first nation to report more than 400,000 new cases in a 24-hour period on April 30, 2021[3]. Since 25th March 2020, multiple phases of lockdown and unlocking have taken place through June 15th, 2021 in India. Number of deaths were 28 in April 2020 where as it was 215,542 as on 26th April 2021[4].

The general public was in a state of panic due to the daily increase in positive cases and the myths and rumours about COVID-19 that were going viral on social media. The pandemic

and lockdown had caused a wide range of effects on people [5].

The pandemic has been connected to severe psychological problems, starting with anxiety, stress, and depression [6]. It also resulted in feelings of loneliness [7], sleep issues [8], anger [9] and other unpleasant emotions when people were in the setting of isolation and quarantine.

Along with the outbreak of the pandemic and imposing of nationwide lockdown combined with the increased demands of family and professional life on women, there has been an increase in the prevalence of psychological distress among women [10]. The uncertainties of the pandemic would have made them experience a sense of loss of control over every aspect of life including employment, caregiving responsibilities, mental health, and overall well-being.

Locus of control is a construct which defines how individuals attribute the determinants of events in their life activities. According to Rotter (1975), internality and externality represents two ends of a continuum, not an either typology. People who have an internal locus of control tend to attribute their outcomes of events to their own control whereas people who have an external locus of control believe that environmental forces determine their life.

Psychological distress is a set of painful psychological and physical symptoms which are related to normal fluctuations of mood in most people. It may represent the beginning of major depressive disorder, anxiety disorder, schizophrenia, somatization disorder, and other clinical conditions [11].

People who have an internal locus of control believe it is their duty to change their circumstances by proactive actions and decisions [12]. Individuals with internal locus of control take preventive measures even during disasters when exerting control over global causes is impossible, such as purchasing insurance [13]. In the pandemic situation, since the transmission of illness partly depends on the actions of others, personal control is limited. However, those who have internal locus of control can take preventative measures to safeguard themselves from the risk of infection, such as washing their hands, using face masks, and avoiding close contact with others. By making such attempts, these uncertain situations might seem less dangerous [12]. Thus, it can be expected that Internal locus of control to be negatively associated with psychological distress. Whereas external locus of control is associated with symptoms of depression and anxiety [14].

Research has shown that women experience more psychological distress than men and some of the factors contributing to psychological distress in working women are, job dissatisfaction, and family work conflict [15]. Many studies have been conducted to explore the psychological effects of COVID-19. Most of the studies are on general public and health care workers [6, 16, 17]. Although women, especially working women are the most vulnerable population during the times of emergencies, studies investigating the particular experiences of women are rare. Some studies have shown that women are being disproportionately impacted by the pandemic [6].

External locus of control is associated with greater symptoms of anxiety, depression and stress [18]. During this period of time, there was a significant relationship between external health locus of control and depression. In fact women were found to have moderate and high scores of psychological distress than men [19]. Both the first and also the second wave of the COVID-19 pandemic have been associated with psychological distress in India [5]. As per the study, depression, anxiety, and stress were all related to wellbeing and satisfaction during the pandemic. The relationships were found to be stronger in the second wave than the first. The psychological health of women was found to be affected more than that of men during both waves.

Secondary analysis of data from a cross-sectional survey in indigenous populations from the Nilgiri Biosphere Reserve in South India showed that symptoms suggestive of psychological distress were reported by 39.9% participants [20], being alone, tobacco use, hypertension, hypertension in family member, and violent conflict in household were independently associated with psychological distress. Women had considerably greater rates of depression [21-24], anxiety [25, 26], stress [24, 27], sleeplessness [28], and somatic problems [29] than men, during the COVID-19 lockdown. Studies have revealed that the prevalence of suicide and self-harm during the COVID-19 has increased significantly compared to the past [30]. A significant positive relationship was also found between COVID-19 anxiety, general sleep quality and mental health with Post-Traumatic Stress Disorder symptoms in students [31].

The existing literature had explored the variables of psychological distress and locus of control in the context of pandemic. However, these studies were not exclusively on women. There is scant factual information reported regarding the effects of the pandemic on women, especially working women. Thus, the present study addresses the gap in literature by studying the relationship between Locus of control and psychological distress among working women during the pandemic. The study takes a step ahead by exploring the perception of the impact of the COVID-19 Pandemic on the personal and professional life of working women.

The purpose of the present study was to understand the relationship between locus of control and psychological distress among working women during the pandemic. The study also intended to investigate the perception of the impact of the COVID-19 pandemic on personal and professional life. The main objectives of this study were to study the relationship between locus of control and psychological distress among working women during the pandemic and to identify the impact of the COVID-19 pandemic on the personal and professional life of working women.

Method

The present study was conducted on working women in the age range of 25-45 years residing in Bangalore. The women who were minimum three years into working and who had minimum qualification of graduation were considered for the study. Working women with physical

and psychological disabilities were excluded from the study. Purposive and convenient sampling technique was used to select the samples. Informed consent was taken from the participants to be a part of the study. The two variables under study were locus of control and psychological distress in the context of COVID-19.

Mixed method research design was used for the study. The mixed method included quantitative (ex- experiments, surveys) and qualitative (ex- focused group discussions, interviews) research. This method was preferred as this integration provides better knowledge of the research problem and objectives. It was hypothesized that Internal locus of control would be negatively related with psychological distress among working women during the pandemic (H1) and external locus of control would be positively related with psychological distress among working women during the pandemic (H2).

The tool used in this study was as follows:

Levenson's Multidimensional Locus of Control Scale: The Scale, developed by Hannah Levenson in 1973 includes an Internal, a Powerful Others, and a Chance subscale. Levenson differentiated between two types of external influence, on the basis that people who consider the world as unordered and chaotic would behave and think differently from people who believe in an ordered world controlled by powerful others—such as political leaders, parents or God—where a possibility of control exists [32] . It consists of 24 items with choices ranging from Strongly Agree (SA) to Strongly Disagree (SD). Items 1, 4, 5, 9, 18, 19, 21, and 23 assesses internal locus of control orientation. Items 3, 8, 11, 13, 15, 17, 20, and 22 assess control by Powerful Others. Items 2, 6, 7, 10, 12, 14, 16, and 24 assess chance control. The scores of each subscale lies between 0 and 48. High scores on the externality Powerful Others (P) scale indicates that respondents expect that powerful others exert a high degree of control over their lives. High scores on externality-Chance (C) scale indicates that respondents expect chance forces or luck to have control over their lives. High Scores on Internality (I) scale indicates that respondents expect to have a high degree of control over their own lives. The highest score of the three categories is considered as the respondent belonging to that category. High ratings on either the Powerful Others scale or the Chance scale indicate a strong external locus of control. Co-efficient alpha internal consistency of this scale was 0.85 and co-efficient alpha internal consistency of reliability was 0.78. The tool used to assess psychological distress was Kessler psychological distress scale (K10). The scale was developed in 1992 for mental health screening in population surveys by Kessler and Mroczek. This is a nonspecific scale based on 10 questions about the level of anxiety and depressive symptoms a person may have experienced in the past four weeks [33]. It is a widely used, simple self-report measure of psychological distress which can be used to identify those in need of further assessment for anxiety and depression. This measure was designed for use in the general population; however, it may also serve as a useful clinical tool. The K10 comprises 10 questions that are answered using a five-point scale (where 5 = all of the time, and 1 = none of the time). For all questions, the client circles the answer truest for them in the past four weeks. Scores are then summed with the maximum score of 50 indicating severe distress, and the minimum score of 10 indicating no distress. Scores from 10-15 indicate low distress, 16-21 indicate moderate distress, 22-29 indicate high distress, and 30-50 indicate very high distress. The tool is reliable with Cronbach's α of 0.88.

The study was executed in two phases. In Phase 1, a socio demographic sheet was given to collect the details of the samples. Locus of control scale and psychological distress scale were administered on 81 samples chosen using convenient and purposive sampling, responses were scored and analyzed. Since the population size was unknown, the sample size decided by the researchers were 200. As it was during the COVID-19 pandemic, many working women who were approached to take part in the study were not willing to be part of the study due to time constrains and other personal contingencies hence the final sample size was 81. In Phase 2, ten working women were randomly selected from Phase 1 of the study and they were interviewed with open ended questions developed by the researchers. Responses given by the sample were noted verbatim. The data was analyzed according to the norms given for the respective scales. Pearsons's product moment correlation was computed between locus of control orientation and psychological distress using SPSS version 16.0. Thematic and content analysis was done for the Phase 2 interviews. Responses given by samples were categorized into themes for better understanding and analysis.

Results

As represented in Table 1, it can be seen that the mean of the sample (N=50) for Internal Locus of Control was 63.26, std. error was 0.95 and SD was 6.72. The mean score for Psychological Distress was 19.02 std. error 0.98 and SD was 6.95. On the psychological distress scale, the mean values have been interpreted as "Likely to be well".

Table-1a shows that the obtained correlation coefficient r is -0.43 indicating a moderate relationship between Internal locus of control and psychological distress. The p value obtained is 0.001 which shows that the relationship between the two variables is statistically significant. Results confirm the first hypothesis that "there will be a negative relationship between Internal locus of control and psychological distress among working women".

Table 2 shows that the mean of the sample (N=31) for External Locus of Control is 79.64, std. error is 1.22 and SD is 6.83. The mean score for Psychological Distress is 16.51 std. error 1.13 and SD is 6.30. On the psychological distress scale, the mean values have been interpreted as "Likely to be well".

From Table-2a it can be seen that the obtained correlation coefficient r is -0.13 indicating a negative negligible relationship between external locus of control and psychological distress. The p value obtained is 0.48 which shows that the relationship between the two variables is not statistically significant. Results do not confirm the second hypothesis that "there will be a positive relationship between external locus of control and psychological distress among working women".

Table 1. Total, Mean and SD of the Sample with Internal Locus of Control and Psychological Distress Scale

	N	Mean		Std. Deviation
	Statistic	Statistic	Std. Error	Statistic
Internal Locus of Control	50	63.26	0.95	6.72
Psychological Distress	50	19.02	0.98	6.95
Valid N (listwise)	50			

Table 1a. Correlation Coefficient of Internal Locus of Control and Psychological Distress among Working Women

		Psychological Distress
Internal Locus of Control	Pearson Correlation	-0.43
	Sig. (2-tailed)	0.001
	N	50

Table 2. Total, Mean and SD of the Sample with External Locus of Control and Psychological Distress Scale

	N	Mean		Std. Deviation
	Statistic	Statistic	Std. Error	Statistic
External Locus of Control	31	79.64	1.22	6.83
Psychological Distress	31	16.51	1.13	6.30
Valid N (listwise)	31			

Table 2a. Correlation Coefficient of External Locus of Control and Psychological Distress among Working Women

		Psychological Distress
External Locus of Control	Pearson Correlation	-0.13
	P (2-tailed)	0.48
	N	31

Results from the qualitative interview revealed the three following themes:

Theme-1: Perception of the impact of the COVID-19 pandemic on personal and professional life.

The participants expressed their views and shared their struggles on how the pandemic affected them both personally and professionally. Most of them said that work life was affected and financial difficulties increased due to partial payment and loss in business for those who dealt with import and export of goods, due to lockdown products were stuck at ports. These issues in turn affected the personal life as it was difficult to manage the commitments and taking care of family members which led to frustration, and anger. Also, on professional front, most of them said that they had never imaged that all things can be done remotely. In regards to teachers, the pandemic brought about a new change in the thought processes that everything can be done online, which also increased the professional pressure of enhancing the digital skills which became stressful. Adaptation to working remotely was initially difficult. Although it was initially difficult, almost all of them opined that they were able to adapt to changes gradually and manage the situation.

On the other side, women also realized that things could happen at the comfort of their houses. The bonding in the family increased, as they spent more time together with family members for a long period of time, which otherwise was not possible due to the busy and monotonous daily life schedules, though the family members were involved in their works remotely, the bonding deepened as there was no chance to go out. They found happiness in finding their own entertainment inside the home, by exploring their cooking interests, playing indoor games, and watching movies which increased the bonding among each other.

Theme-2: Experience of loss of control and psychological distress

For most women, health was a major concern and they had a fear of getting infected by COVID-19. In few cases, many of their family members were infected due to which there was societal stigma which added on to the distress. Some of them even lost their family members which was very disturbing. Helplessness, fearfulness and uncertainties led them to experience a sort of loss of control. Switching to an online life was uncomfortable, and the restriction of movement caused many problems.

In the initial stages, when not much was known about the virus, they used to be anxious if any family members even suffered from a common cold. The financial situation also caused distress in the families. Although the situations were difficult, they were able to cope with the help and support of their family and friends.

Theme-3: lessons learned and positive aspects of the pandemic

With regard to the lessons learned during the pandemic and the positive aspects of the pandemic, it is possible to lead life, even if you don't have luxurious facilities and one can be happy with whatever they have, inside their house. They learned to live with limited resources, as there was crunch in terms of getting things, only the essentials were available during the lockdowns. Some of them said that on the financial front, there was much savings because there were no extra expenses. They also said that certain values which were only on book were put into practice, like family values, supporting and helping the needy, social responsibilities became very visible and conscious practice. They learnt that there is more than one way to survive in this modern world. Though it may seem that there is no way out but if searched with an intent there are numerous ways. They realized the importance of interpersonal relationships and the need to communicate with them. They also learnt not to go overboard with expenses. They learnt to expect any kind of change at any point of life, and they are capable of handling and adapting to change.

Discussion

Locus of control is a construct which defines how individuals attribute the determinants of events in their life activities. People who have an internal locus of control tend to attribute their outcomes of events to their own control whereas people who have an external locus of control believe that environmental forces determine their life.

Psychological distress is a set of painful psychological and physical symptoms which are related to normal fluctuations of mood in most people [11]. Psychological distress among working women has been a significant concern during the COVID-19 pandemic. The pandemic brought about a multitude of challenges that affected people's mental health, and working women faced specific stressors due to their multiple roles and responsibilities. Many women faced challenges and experienced a sense of loss of control due to the pandemic's impact on their work, home life, and overall well-being.

The purpose of this study was to understand the relationship between locus of control and psychological distress among working women during the COVID-19 pandemic. The study also intended to find out the perception of the impact of the COVID-19 pandemic on personal and professional life of working women. The study revealed that both internal locus of control and external locus of control are negatively related to psychological distress, but there were some differences in the nature of correlation. Internal locus of control scores was moderately negatively correlated and external locus of control scores showed negative negligible relationship with psychological distress. However, another research has revealed that external locus of control is associated with symptoms of anxiety and depression [18]. This may be due to the fact that the mean scores of the sample showed that the majority of women's locus of control orientation was internal and the mean scores of the sample on psychological distress indicated that they are likely to be well, did not experience high levels of distress. According to our interviews, it was difficult for working women to cope with the drastic changes and uncertainties of the COVID-19 pandemic. These women experienced distress and felt out of control, but gradually were able to adapt to the changes, with the support system of their family and friends. The commonality found among all of them was that they appreciated the value and importance of interpersonal relationships and realized that they are capable of handling and adapting to change.

Conclusion

The study aimed to explore the relationship between locus of control and psychological distress during the COVID-19 pandemic and to understand the perception of the impact of COVID-19 Pandemic on the personal and professional life of working women. The results revealed that there is no strong correlation between locus of control orientation and psychological distress. There was a moderate negative relationship between internal locus of control and psychological distress and weak negative correlation between external locus of control and psychological distress among working women during the COVID-19 pandemic. The locus of control orientation and the amount of distress and perceptions varied from women to women. Strong family support and positive interpersonal relationships helped them overcome the challenges in both their personal and professional lives.

This study faced a few limitations just like any other study. The sample size used for the study was small when compared to the population. In addition, other psychological factors which lead to distress were not considered in the present study. The socio demographic details like family type, and the socio-economic status was also not included. Further research can be conducted including the above-mentioned demographic variables and also quantitative study can be done with large number of samples (working women) in different geographical locations for a better understanding about the relationship between external locus of control and psychological distress. Focused Group Discussions (FGD) and interviews can be facilitated with many groups, and different professions to identify different perspectives about the effect of pandemic on personal and professional lives.

The locus of control orientation and the amount of distress and perceptions varies from women to women. The study highlights the importance of having strong support from family and good interpersonal relationships in overcoming any kind of disaster. It serves as a frame work and reference for mental health practitioners and psychologists in designing strategies and interventions to improve, promote and strengthen interpersonal relationships for the wellbeing. The study also shows the adaptable and flexible nature of women to any kind of situation.

Conflict of interest

The authors declare that they have no conflicts of interest.

Ethical Approval

The Study was conducted by the authors by getting an informed consent by the participants. Anonymity of the individuals participating in the study was ensured. All communication in relation to the research was done with honesty and transparency.

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