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Adjustments to unemployment amid COVID-19: Implementation of ABCX model of family stress on Chinese tourism industry

Umar Nawaz Kayani¹, Khwaja Naveed², Ahmet Faruk Aysan^{3*}, Salim Khan² and Akbar Said²

Abstract: This research investigates the psychological health of tourism industry's workforce in the midst of COVID-19 in the context of Chinese Tourism Industry. We have employed stress theory for the predictive analysis and hypothesis crafting in terms of mediator (financial dissatisfaction) and moderators (quality of marital relationship and family income). Path analysis has been used to evaluate different relationships while adopting ABCX family stress model. The findings confirm that alongside the economic and livelihood impacts of the unemployment, the tourism

ABOUT THE AUTHORS

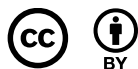
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industry's workforce has also suffered from psychological externalities of the phenomenon, not only individually but also in terms of their relationships at different levels. It further elaborates the inculcation of resilience in the tourism workforce on part of the maintenance of stability and harmony in the original family. It implies that the head over heels job responsibilities and joblessness foster work-family conflict equally likely.

Subjects: Stress Analysis; Psychological Science; Unemployment

Keywords: COVID-19; stress theory; psychological effects; unemployment

1. Introduction

The pandemic due to Coronavirus Disease (COVID-19) is inflicting heavy losses on almost all industries. Unemployment has been the top story in daily global news since the issue has started and the lockdown has been imposed. According to the data released by the Chinese National Bureau of Statistics, urban unemployment in March 2020 was 5.9% nationwide and 5.7% in 31 major Chinese cities, 0.7 and 0.5 percentage points higher than that at the end of 2019, respectively. At the end of the first quarter of 2020, the reported urban unemployment was at a rate of 3.66%, or 0.04% higher than at the end of 2019 (McKibbin & Fernando, 2021). Nevertheless, a prevailing circumstance in China arises wherein a considerable proportion of individuals who experience job loss do not promptly, or in some instances, ever register with the government. Consequently, this discrepancy in registration leads to an evident limitation in the sampled unemployment rate obtained through surveys. Moreover, when considering the dimensions of index caliber and underemployment, it becomes apparent that the actual unemployment rate in China appears to surpass the reported figures, emphasizing the likelihood of a more substantial unemployment reality.

The tourism sector has experienced the most significant impact, being the primary focus of an epidemic, and has been completely suspended since the onset of the pandemic. As compared to other industries, the occupational stress in the tourism industry has been reported to have increased recently (Karatepe & Tizabi, 2011; O'neill & Davis, 2016) whereby the pandemic aids in its further devastation (Khan et al., 2021; Wang et al., 2022). The lynchpin of the devastation seems to be the unemployment, which is reported as a major cause of explosive growth in poverty and problems related to physical and mental health concatenated with worsening emotional health, domestic violence, divorce rate, and suicides (Sullivan & Von Wachter, 2009; Van Horn, 2014). For ordinary wage earners with a single source of income, unemployment means the discontinuation of their income. If a person loses job, there is an impact on the whole family. Without income, the status of the unemployed in the family declines sharply. Moreover, amid the importance of work life in an individual's social relationships, unemployment isolates them from society. It not only results in losing the bond with others but also leads to loss of the acquired social status (Paugam, 2016). This issue poses the problem of inferiority complex and personality deviation which may lead to a profound personality crisis. A fresh study evaluating the effects of COVID-19 on mental health found that the existing self-reported moderate depression and anxiety symptoms have increased among the general public in this new scenario (Wang et al., 2020).

In the purview of the externalities posed by the pandemic, a scant number of studies has addressed the multidimensional stress analysis of unemployment in Tourism industry. Along with that, the existing studies are majorly conducted in the institutional settings of the developed world (Blustein et al., 2020). Therefore, this research employed Hill's ABC-X model (Hill, 1949) to the unemployment in the tourism industry of China. In the first proposal of this model back in 1949, the survivors and defaulters of the great depression were compared, and we have employed it on the unemployed of Chinese tourism industry. According to the theory of stress and adaptation (LoBiondo-Wood, 2003), stress events can disturb the family equilibrium and

families seek to rebalance it through different coping mechanisms. Major stressful events cited in the literature include sudden financial difficulties, physical abuse of children or spouses, prolonged illness, drug abuse and relapses, accidents, and any other emergency.

In the ABC-X model of stress and adaptation, (A) represents the perturbing event (Stressor) of the balance. (B) refers to the protective factors (Resources) leveraged by social support through connection with community and church. (C) refers to a protective factor in terms of the optimistic perception (Perceptions of a Stressor) of a common family towards stress factors which leverage better handling of the situation. (X) refers to the resulting level of psychological and mental health crises (Stress). The B and C of the model are conceptualized as the potential mediators or moderators in the relationship between A and X. There are many other models presented by different researchers, but Hill's original model has remained as the rudimental part of the family stress theory while qualifying the test of time (LeBaron-Black, Yorgason, Curran, Saxey, Okamoto, 2022; LoBiondo-Wood, 2003). His findings and recommendations are still pertinent as it fosters the related psychological effects caused by unemployment as well as potential chain reactions that they provoke. Given that proximal and distal literature has affirmed the correlation of mental health with distressing events (Lyra et al., 2021; Mills et al., 2006), this study further proposes the pandemic-induced unemployment as a stressor and investigates its psychological impact on the employees along with the potential chain reaction based on the ABC-X model.

In accordance with the model, we conceptualize the relationship between the stressors due to unemployment amid COVID-19 and psychological impacts in terms of financial dissatisfaction, quality of marital relationship, and family income. We identify financial stressors, work-family conflict, and parenting stressors due to unemployment amid COVID-19 as the stressors (A). These are being identified as stressors as they further exacerbate the problems inflicted upon by COVID-19. Amid the negative impact of unemployment due to COVID-19 on the mental health of unemployed, we have identified the psychological impacts as the Stress outcome (X). Finance is an important aspect of life, and the perception of financial concerns (financial dissatisfaction) has also been reported to have negative psychological impacts (Wilson, Lee, Fitzgerald; Oosterhoff, Sevi, Shook, 2020). Hence, we have identified financial dissatisfaction (C) as a promising mediator, acting as a conduit through which the Stressors and Stress influence individuals. However, the existing literature falls short in elucidating the specific resources (B) that unemployed individuals can harness to shield themselves from the adverse effects of stressors and their perception, particularly in relation to financial dissatisfaction. The impact of intimate relationship-status on one's quality of life has been established in recent literature (Falconier & Jackson, 2020). Consequently, the perception of the quality of marital relationship has been identified as a potential moderator in the relationship between stressors and stress that is laden with financial dissatisfaction. Along with that, the family income is also reported to help in coping with the externalities of COVID-19 (Palma & Araos, 2021); therefore, we have also identified family income (Resource) as a potential moderator of the mediated relationship.

By conceptualizing ABC-X model in this way, this study contributes to the literature on the stress analysis of unemployment. Within the context of the labor market, where layoff decisions are predominantly guided by person-specific productivity factors and influenced by classical economic principles of the hidden hand, the human dimension of such decisions tends to be overlooked. This study sheds light on the often neglected human aspect of forced-layoff decisions, emphasizing the multifaceted repercussions on individuals' mental and social well-being. It will let the managers to consider the scale of impact of a layoff decision. Also, conceptualizing stress due to unemployment in this way would lead clinicians and educators to counsel the unemployed in a more robust way.

2. Literature review

2.1. Stress theory

Stress refers to the state of mental strain arising from a series of non-specific physiological and psychological stressors which are caused by an individual's cognitive evaluation of internal and external environmental stimuli. Hans Selye (1907–1982), a famous Canadian internal-lactating physiologist, first applied the concept of stress to the biomedical field. Based on extensive studies of humans and animals, he developed his famous theory of stress and adaptation. Stressor, whether physical or mental and its potential causes (such as sudden changes) may contribute to the appearance of stress (Tan & Yip, 2018). Lazarus (1966) defines it in terms of an individual's self-perception regarding their coping ability to the threats posed to their wellbeing. Stress may also be associated with an increase in mental health problems, such as post-traumatic stress disorder (PTSD), depression, and pathological ageing (Folkman & Lazarus, 1984; Marin et al., 2011). It is also concatenated with smoking, alcohol abuse, use of illicit substances and sleeplessness (Ellis et al., 2012; Kassel et al., 2003). The 10 common life stressors identified by Porensky et al. (2020) are death apprehensions, divorce-related events, geriatric care, losing a job, the start of a new job, financial constraints, getting into married life, moving from one place to another, chronic and life-threatening illness, and interpersonal conflicts. In terms of the above 10 factors, work-related stressors are also discussed in different studies (Porensky et al., 2020).

2.2. Unemployment and psychological effects

During the COVID-19 pandemic, there has already been a general increase in stress, depression, and anxiety (Boden et al., 2021). Unemployment serves to intensify this effect, as employment carries with it a dual implication: one that is visible and another that holds potential. The former pertains to the formal agreement between employer and employee, encompassing the dynamics of labor compensation. The latter encompasses various dimensions: (1) the structuring of one's daily life in terms of time and activities, (2) adherence to societal norms and regulations beyond the confines of family, (3) the pursuit of collective goals that transcend individual aspirations, and (4) the fusion of individuals and groups, as well as the interplay between ideals and reality. These potential impacts start to shape an individual's mental state right from the inception of the employment contract, exerting their influence throughout the employment journey (Boden et al., 2021; Palma & Araos, 2021).

In 1929, the great depression inflicted worst impacts on the economic and societal aspects of society. On 24 October 1929, the biggest economic crisis broke out in the United States with the crash of the US stock market. After a 10-year bullish market, the US financial sector buckled, and stocks were knocked out overnight from the summit to the void. Within a week, Americans lost \$10 billion on the stock market, and dairy farmers threw away their product (milk) into the river Mississippi to destroy surplus products. The stock index fell from 363 (highest point) to 40.56 in July 1932 whereby the biggest slump was more than 90%. The crisis multiplied with time and turned into a global economic crisis ultimately. After that, the US and the world entered a period of economic depression and stagflation which lasted for 10 years. Jahoda (1981) reported a positive relationship between unemployment and an individual's stress level during the crisis. Eisenberg and Lazarsfeld (1938) proposed three stages of stress after being unemployed: the initial stage of mental shock, the subsequent stage of intense emotional irritability and psychological pessimism, and the ultimate stage of adaptation to the final new state. This stream of research got ignored after the crisis as there was ample employment around the world until the 1980s. However, after that, through effective measurement and clutch of the neurological symptoms of the unemployed, outstanding achievements in this respect have been published continuously, confirming the adverse psychological effects of unemployment on individuals (Mæhlisen et al., 2018; Vélez-Coto, Rute-Pérez, Pérez-García & Caracuel, 2021).

The proximal literature has presented the reasons for the individual differences in terms of the level of psychological reaction to unemployment. The empirical findings suggest that unemployment

instigates a state of mind having adverse effects on human health which varies significantly from person to person. The impact of being unemployed differentiates on the bases of level of education, occupational traits and professional background, gender, and ethnic affiliation (Gould, 2015). The impact of unemployment also changes as the unemployment prolongs. A series of qualitative studies have consistently shown that long-term unemployment leads to a decline in self-worth and an increase in self-blame (Chen & Lai, 2015; Newman, 1999; Sharone, 2013; Smith, 2002; Wanberg, 2012). For instance, Newman (1999) studied unemployed managers and unveiled that the majority of them view themselves as losers. Sharone (2013) also depicted these adverse psychological effects among white-collar workers (Newman, 1999; Sharone, 2013). Lawes (2023) reported that unemployment has a significant adverse impact on the cognitive, affective, and eudaimonic wellbeing of individuals. A study conducted in Bangladesh found that the unemployment psychologically influence individuals in terms of mental depression, embarrassment, erosion of inner potentiality, degradation of personality, and frustration (Rashid & Islam, 2020).

The literature also reports that, unemployment has a considerable psychological brunt, not only on the unemployed themselves but also on their family members, as they may lose their position and prestige among their peers. Some observations reveal that the children become emotionally unstable up to some extent, much in the same way as their unemployed parents do (Davis, 1936; Dunn, 1934; Schumacher, 1934). In line, Dunn (1934) put forward that children whose parents face unemployment are in urgent need of therapy. When unemployment takes place, Schumacher (1934) described parents as invariably engulfed by their children's emotional ebb and flow as well as backlash and depression. Elderton (1931) pointed out that such children are deprived of not only a sense of security but a source of leadership. A family with unemployed parents may meet fierce backlash from the children if they fail to keep the family afloat. Brandt (1932) noted that this condition leads boys and girls to fall into bad friends and bad habits (Brandt, 1932; Davis, 1936; Dunn, 1934; Elderton, 1931).

2.3. Different mental states related to unemployment

2.3.1. Depression and uneasiness

The unemployed are found to be in a low mood and indifferent towards the outside world as compared to the employed (Talvitie & Ihanus, 2012). The same conclusion was drawn from the study when Kessler et al. (1987) randomly selected 492 employed and unemployed persons from the US census table in 1987 (Kessler et al., 1987). From the longitudinal comparison of the psychological state of employed and unemployed, it can be seen that the unemployed are prone to depression and anxiety (Leana & Feldman, 1991). This comparison was fully demonstrated in 1991 by Leana and Feldman while investigating 157 employees of aerospace companies who were fired from the job. A comparison between those who have recently lost their jobs and those who continue to be unemployed shows that the latter's psychological tension and anxiety are more evident. The study by Warr and Jackson in 1984 of 954 unemployed persons showed that 20%–30% of them had negative symptoms of psychological over-reaction, especially those who were willing to go for re-employment but lacked self-confidence and those who were too attached to work before they lost their jobs (Warr & Jackson, 1984). Fryer and Warr (1984) studied the relationship between unemployment and cognitive difficulties in 1984 from a survey of 954 unemployed people in the United Kingdom (Fryer & Warr, 1984).

Research concerning depression, anxiety, stress, and other psychological states were addressed in the 1980s from the perspective of mental illness. A comparative study was conducted on the unemployed workers at a failed Danish shipbuilding factory, and the results found that after the formerly unemployed state, many people needed to go to the hospital for mental illness treatment within 3 years (Grusky et al., 2011). The longer they were without their jobs, the more they experienced scarcity (Brief et al., 1995), depletion of resources (Kinicki et al., 2000) and even personality deviations (Boyce et al., 2015). This phenomenon was found to be more pronounced in the unemployed engaged in job-seeking activities (Krueger et al., 2011).

2.3.2. Damage to self-esteem

After the self-esteem of the unemployed is damaged, they have a sense of failure that weakens their self-confidence and reduces their degree of self-satisfaction. Stokes and Cochrane (1984) make a comparison among 48 unemployed persons who clearly showed difficulty or even hostility towards others and found themselves guilty. In a follow-up survey of high school graduates, comparing the unemployed with the employed showed that the unemployed have low self-esteem, a depressed mood, and a negative mentality in which their actions and destiny are controlled and determined by others (Álvaro et al., 2019; Stokes & Cochrane, 1984). Even if the unemployed are re-employed, they still use to be indifferent to others having a psychological gap with their new employer and a sense of inferiority.

2.3.3. Poor health

Grayson (1989) surveyed 400 unemployed persons and found that 50% of those unemployed for more than 3 years suffered fever, back pain, hand and foot pain, arthritis, and other symptoms above the national average (Grayson, 1989). For the unemployed, they not only face difficulties brought about by unemployment but also face huge societal pressure. A study on the correlation between unemployment and suicide was carried out by the Platt from 1953 to 1982 and continued in 1995, concluding that the number of unemployed persons committing suicide is higher than the number of employed persons.

With regard to the impact of unemployment on families, studies have shown that unemployment can lead to bad family relations, such as increased family conflicts, family tension, deterioration of couples' relations, and even separation or divorce. For spouses of unemployed persons, physical and mental distress increases, and mental health deteriorates. A survey showed no significant difference between unemployed wives and employed wives in the first 2 months, but then after 4 months, the former begins to become sensitive to interpersonal relationships, with symptoms of depression, uneasiness, and hostility.

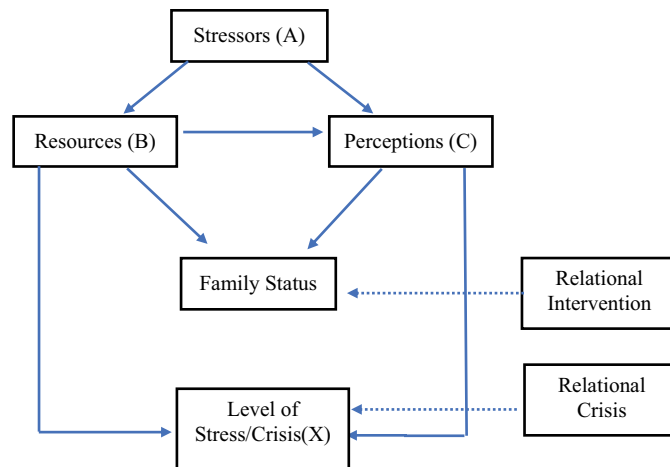
2.4. Financial dissatisfaction as a mediator

As financial aspect is an indispensable part of one's life therefore, the perception of financial concerns termed as financial dissatisfaction (Wilson, Lee, Fitzgerald; Oosterhoff, Sevi, Shook, 2020) has also been reported to have negative psychological impacts. Financial dissatisfaction has been reported to cause anxiety in upto 60% of subjects aged 21–62 leading to mental illness in one-third of the adults (Hasler, Lusardi & Valdes, 2021). The loss of income in case of unemployment is related with financial stress (Hertz-Palmor et al., 2021). Apart from the loss of work-related income, COVID-19 also inflicted circumvention of major purchases, increasing the debt of credit card, and depletion of savings (Karpman et al., 2020). Therefore, the pandemic effects might be positively related with financial dissatisfaction apart from the direct income effect of unemployment.

2.5. Quality of marital relationship and family income as moderators

The economic contexts in which the unemployed are positioned also impact the extent to which the pandemic may have financial effects (Friedline, Chen & Morrow, 2021). The financial impacts are reported to be more severe in low-income families as compared to well-off families (Karpman, 2020) whereby some studies have reported that liquid assets serve-up the role of a shield between the impact of pandemic and financial dissatisfaction (Roll & Despard, 2020). Therefore, family income has been considered as a moderator on the relationship between unemployment and its psychological effects. Along with that, researchers have also investigated other features which help in coping with the challenges faced by the unemployed. In this regard, intimate relationship status has been a construct of interest for researchers, especially in the midst of COVID-19 pandemic. This way, the relationship status in terms of marital status engenders the theoretical meaning of relationship status in this study.

Figure 1. Reuben Hill (1949) ABC-X model of family stress integrated with the importance of family status.



A quality relationship would be more potent to shield against the negative impacts of financial dissatisfaction and ameliorate the psychological impacts of unemployment. For instance, Tran et al. (2018) reported an association between stressors and unemployment psychological effects.

3. Model and hypotheses

This paper uses the source of financial pressure and pressure accumulation as the pressure response point of the unemployed people. The data come from ($N = 521$) the data set of employees in tourism-related industries and is analyzed using the ABC-X model of family stress and adaptation (Hill, 1949).

We have based our research on previous studies that have confirmed the impact of a family's financial status, family stressors, and stress accumulation on the response to unemployment. As per the knowledge of the researchers, no previous study has combined these variables, particularly in the framework of family stress. This study aims to explore this connection with financial stressors and family stressors as well as with financial discontent and marital status, to deepen the response and explanation of response in unemployment (see Figure 1). Based on family stress theory, the following assumptions are put forward for the Hill's (1949) ABC-X family stress model (Hill, 1949).

H1. There is a direct relationship between sources of stress (financial pressure, work-family conflict, and parental pressure) and unemployment's psychological effects.

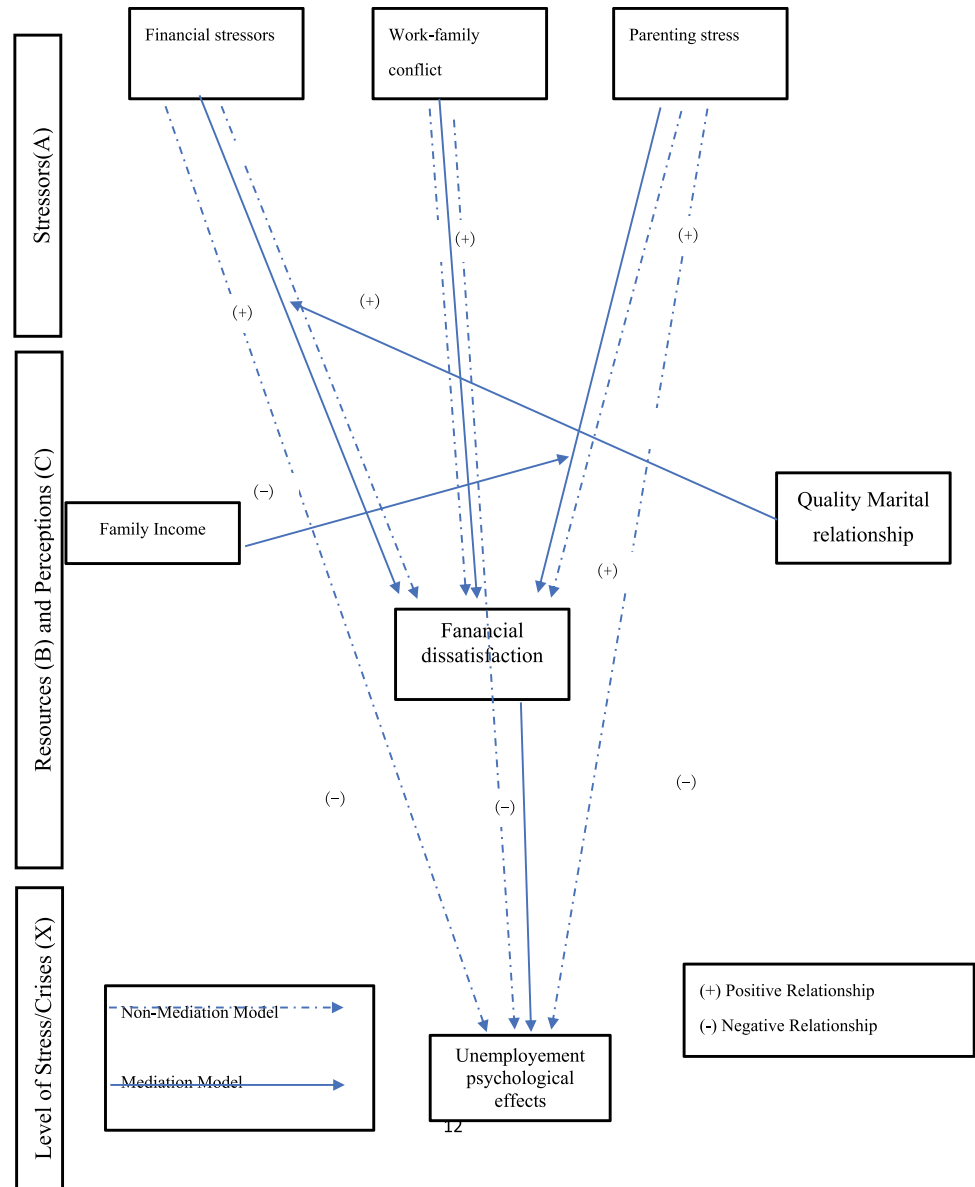
H2. There is a direct relation between sources of stress (financial pressure, work-family conflict, and parental pressure) and perception (financial dissatisfaction).

H3. There is a direct relation between perception (financial dissatisfaction) and unemployment's psychological effects.

H4. There is a mediated relationship between sources of stress (financial pressure, work-family conflict, and parental pressure) and unemployment's psychological effects through financial dissatisfaction.

H5. There is a negative moderation of resources (Family income) on the mediated relationship between stressors and unemployment's psychological effects through the mediator: financial dissatisfaction.

Figure 2. Mapping of hypotheses through path analysis to the ABC-X model of family stress and adaptation (Hill, 1949).



H5. There is a negative moderation of perception (Quality of marital relationship) on the mediated relationship between stressors and unemployments' psychological effects through the mediator: financial dissatisfaction (please see Figure 2 for the diagrammatic representation of the hypotheses).

4. Methodology

4.1. Data collection

The research designed was survey-based and the data were collected from respondents working in tourism-related industries. The data were collected through questionnaires distributed to investigate the hotels, travel agencies, and airlines in the tourism industry of southeast coastal cities in China. The questionnaires were distributed among the respondents via online mode. The research subjects were randomly selected from the industry. At the end of the survey, around 602 subjects were investigated. Then, the missing answers data and double tag data were screened out and

Table 1. Demographic profile of the respondents

Measures	Item	Frequency	Percentage
Gender	Male	277	53.16
	Female	244	46.83
Education	College Level	61	11.70
	Bachelor	221	42.41
	Master	239	45.87
Age	21–25	221	42.41
	26–30	133	25.52
	31–35	109	20.92
	36–40	58	26.24
Family Income	<5000	71	13.62
	5000–10,000	134	25.71
	10,000–20,000	185	35.50
	>20,000	131	25.14

521 valid questionnaires were retained for data analysis. The subsequent fluctuations followed the same questionnaire completion pattern (Day et al., 2016).

The demographic profile of the respondents is given in Table 1. Most of the respondents belonged to the male group (53.16), had the master’s degree as the highest education (45.87%), and were falling in the age group of 21–25 (42.41%). Moreover, the majority of the respondents had a family income between 10,000 and 200,000.

4.2. Measures

Items for measuring the scale were adopted from the previous scales.

4.2.1. Financial stressors

The financial stressor scale (10 items; $\alpha = 0.87$; $r = 0.712$, $P < 0.001$) evaluates each partner’s persistent stressors as they relate to finance. This scale is a part of the general stress measure of Umberson et al. (2005). Participants were asked as to how much post-unemployment pressure they have had in the past 6 months through interrogative propositions like “It is difficult to pay bills, housing, medical needs, there is no saving due to excess bills” etc. This construct was measured with the Likert scale ranging from not occurred (0) to occurred and very serious (5).

4.2.2. Work-family conflict

The work-family conflict scale has 16 items ($\alpha = 0.867$) measuring the two-way conflict from work on family and family on work in terms of negative spillover effect (Grzywacz & Marks, 2000). Participants reported on the frequency of eight projects, such as “unemployment makes you stressed at home” (spillover from work to family) and “responsibility at home reduces the need to put yourself into work” (spillover from family to work). Only participants with paid work are included. The construct was measured through a Likert scale ranging from never “0” to always “5.”

4.2.3. Parenting stressors

Following Osborne and McLanahan (2007), the parenting stressor scale with 10 items ($\alpha = 0.81$) is used to measure the stress faced in parenting. The subjects in this study had children or older adults (more than 60%), and so they responded to this measure. For instance, respondents reported on “being aware that I have given up more of my life to meet the needs of my family.” The Likert scale for this measure ranges from strongly disagree (1) to strongly agree (5).

Table 2. Means, standard deviations, and correlations

Variable	Mean	Standard Deviation	1	2	3	4	5	6
Financial Stressors	.85	.87						
Work-Family Conflict	4.28	1.36	0.18**					
Parenting Stressors	1.97	.57	0.06	.11*				
Financial Dissatisfaction	2.34	.81	0.65***	.21*	.07			
Quality of Marital Relationship	4.19	.84	0.44*	.13*	.35**	.36*		
Unemployment Psychological Effects	1.64	.57	0.39***	.18**	.12	.49***	.17*	-

4.2.4. Financial dissatisfaction

The “financial dissatisfaction” index ($\alpha=0.75$) created for the “unemployment psychology of tourism industry employees” project is used in this study. The Likert scale was used to measure this construct from low (1) to excellent (5). For the sake of explanation, the scale was reversed (Karpman, et al., 2020).

4.2.5. Quality of marital relationship

The scale for measuring marital relationship satisfaction was adopted from (Brkljačić et al., 2019) which was comprised of nine items. The scale varies from strongly disagree (1) to strongly agree (5). Cronbach’s alpha for the scale was .80.

4.2.6. Psychological impact of unemployment

The participants (12 items; $\alpha=0.81$; $r=0.733$, $P<0.001$) were asked about the frequency of these events that “Financial stressors,” “Work-family conflict,” and “Parenting stress” cause (Feather, 2012). One of them is “what is your overall mental feeling?” “Can you control your emotions?” “Are you nervous?” “Does your nervousness bother you?” “Do you feel sad, desperate, or even want to give up?” “Do you feel pressure, because you are unemployed?”

5. Findings and analysis

5.1. Descriptive statistics

We performed bivariate correlations for all measures to understand the relationships between the variables. Among the stressors, financial stressors were highly and significantly correlated to financial dissatisfaction ($r=0.65^{***}$) and unemployment psychological effect ($r=.39^{***}$). Financial dissatisfaction and unemployment psychological effect were strongly correlated in terms of the magnitude and significance ($r=.49^{***}$). The correlation among all the variables are given in Table 2.

5.2. Confirmatory factor analysis

Confirmatory Factor Analysis (CFA) was performed to extract the latent factors from the observed variables to check the fitness of the proposed model with the data. The model fit indices ($\chi^2=637.78$, $\chi^2/df=1.31$, CFI = .98, TLI = .98, RMSEA = .03) suggest the best fit of the data with our proposed model. Besides, the loading of individual scale items on their respective latent factors was above .07.

Next, the latent factors were evaluated for reliability and validity. The reliability of the variables was evaluated using the composite reliability (CR) and Cronbach’s Alpha. Both indicators of the reliability had a value above 0.7, suggesting an excellent internal consistency among the items of the latent variables. As given in Table 3, financial dissatisfaction exhibits the highest CR value (.96) followed by that of work-family conflict as the second highest value. The validity of the latent factors was checked using the convergent and divergent validity. The former statistically validates if the items measuring the constructs are actually related to the respective latent factors, whereas the latter confirms that the latent factors supposed to be unrelated are actually not related. Average variance extracted (AVE) is commonly used as a measure of convergent validity (Fornell and Larcker, 1981). The results given in Table 3 reveals that all the latent factors have the AVE values above the threshold level of 0.5 indicating an excellent convergent validity. Unemployment psychological effect has the highest AVE value, whereas work-family conflict has the lowest AVE value. Table 3 also reports on the divergent validity of the constructs, which was estimated by comparing the square root of AVEs of all the latent factors with the correlation among the latent factors. According to the criterion, the square root of AVE of the latent factors should be more than the correlation between the constructs in order to achieve an excellent divergent validity. The square rooted AVEs (given with bold letters in Table 3) of all the constructs are greater than the squared correlation between the constructs.

Table 3. CR, AVE, and inter-item correlation

Construct	CR	α	AVE	1	2	3	4	5	6
Financial Stressor	0.92	0.91	0.73	0.85					
Work-Family Conflict	0.95	0.95	0.68	0.18	0.82				
Parenting Stress	0.92	0.93	0.70	0.06	.11	0.84			
Financial Dissatisfaction	0.96	0.95	0.73	0.65	.21	.05	0.85		
Quality of Marital Relationship	0.93	0.93	0.72	0.44	.13	.35	.36	0.86	
Unemployment Psychological Effect	0.94	0.94	0.77	0.39	.18	.12	.49	.17	0.88

Note: CR = composite reliability, AVE = Average Variance Extracted

5.3. Path analysis

After the latent factors were confirmed and their reliability and validity were tested, the next step was to estimate the relationship between the latent factors according to the proposed hypotheses. The structural model estimates are reported in Table 4.

Table 4 demonstrates that there is a strong and significant relationship between financial stressor and financial dissatisfaction ($\beta = 0.29, P < .001$). Also, there is a significant relationship between financial stressor and quality of marital relationship ($\beta = .10, P < .001$). The third predictor variable in the model, parenting stress, is positively but insignificantly related to financial dissatisfaction ($\beta = .05, P > .05$). Furthermore, in line with the proposed hypotheses, there is a significant relationship of financial dissatisfaction with the psychological effects of unemployment ($\beta = .29, p < .001$).

Table 4 exhibits the moderating effect as well. The interactive effect of marital relationship satisfaction with both financial stressors ($\beta = -.16, P < .05$) and work-family conflict ($\beta = -.15, P < .05$) on financial dissatisfaction is negative and significant. This suggests that the extent to which the respondents are satisfied from their marital relationship minimizes the effect of financial stressor and work-family conflict on financial dissatisfaction of the respondents. However, the moderating effect of family income was positive and significant in the effect of financial stressors ($\beta = .13, P < .001$) and work-family conflict ($\beta = .10, P < .001$) on financial dissatisfaction. This positive moderating effect was observed in the case of lower family income. This means that those respondents with low family income when exposed to financial stressor and work-family conflict are more likely to be financially dissatisfied than the ones with high family income.

5.4. Mediating effect of financial dissatisfaction

In order to test the mediating effect of financial dissatisfaction, the relationship between the predictor variables and outcome variable was estimated with and without the mediator. In the first step, the relationship between the three independent variables and the final dependent variable was estimated without the mediating variable, financial dissatisfaction. The relationship between financial stressors and unemployment's psychological effect was positive and significant ($\beta = .31, P < .01$). With the inclusion of financial dissatisfaction, this effect got insignificant ($\beta = .10, P > .05$). Similarly, the relationship between the work family conflict and unemployment psychological stress was positive and significant ($\beta = .14, P < .001$). The relationship was still significant but comparatively weak with the inclusion of mediator ($\beta = .10, P < .05$). The relationship between the parenting stress and unemployment psychological effects was insignificant both, before and after the inclusion of financial dissatisfaction. The mediating effect was estimated using bootstrapping techniques with 5,000 bootstrapped samples at 95% confidence interval. Based on these results, it can be said that financial dissatisfaction fully mediates the relationship between the financial stressors and unemployment psychological effect (Indirect effect = .07, SE = .03, [.02, .09]), whereas partially mediates the relationship between work-family conflict and psychological effect of unemployment (Indirect effect = .04, SE = .05, [.01, .10]).

5.5. Moderated mediation

As our model comprises both, moderation and mediation simultaneously, we also estimated the moderated mediation effect of both quality of marital relationship and family income. Employing the process analytical tool, we conducted a simultaneous estimation of the moderated mediation effect, considering both the moderating variables of the quality of marital relationship and family income, utilizing Process model 10. Additionally, estimations were conducted using 5,000 bootstrapped samples at a 95% confidence interval (CI). Results revealed that the moderated mediation index pertaining to the quality of marital relationship exhibited insignificance across all three independent variables. This indicates that the quality of marital relationships does not exert a moderating influence on the mediation effect of stressors on the psychological consequences of unemployment through the pathway of financial dissatisfaction.

Table 4. Structural model estimates

Structural paths	β	SE	C.R	Significance Level
Family Income → Psychological effect of unemployment	.13	.05	2.91	<.05
Age → Psychological effect of unemployment	.07	.12	.45	>.05
Gender → Psychological effect of unemployment	.08	.15	.	>.05
Education → Psychological effect of unemployment	.11	.07	3.69	<.05
Financial Stressor → Financial Dissatisfaction	.29	.08	1.91	<.001
Work-Family Conflict → Financial Dissatisfaction	.17	.09	.06	<.05
Parenting Stress → Financial Dissatisfaction	.03	.08	.37	>.05
Financial Dissatisfaction → Psychological Effect of Unemployment	.29	.06	4.83	<.001
Family Income → Psychological Effect of Unemployment	-.06	.10	-.06	>.05
Quality of Marital Relationship → Psychological Effect of Unemployment	.13	.07	.71	<.05
FS*QMR → financial Dissatisfaction	-.16	.05	3.8	<.05
WFC*QMR → Financial Dissatisfaction	-.15	.06	2.5	<.05
PS*QMR → Financial Dissatisfaction	.06	.11	.54	>.05
FS*Income → Financial Dissatisfaction	-.13	.04	3.25	<.001
WFC*Income → Financial Dissatisfaction	-.10	.07	1.42	<.001
PS*Income → Financial Dissatisfaction	.002	.13	.01	>.05

Notes: FS = Financial Stressors, FDS = Financial Dissatisfaction, WFC = work-family conflict, PS = Parenting stress, QMR = Quality of Martial relationship, β = standardized coefficient, SE = standard error, C.R = critical ratio

Table 5 demonstrates the moderated mediation effect both marital relationship satisfaction and family income. Marital relationship satisfaction positively significantly moderated the mediated effect of financial stressors and work-family conflict on psychological effect of unemployment via financial dissatisfaction (index = .03, SE = .05, [.01, .07]) and (index = .01, SE = .07, [.03, .09]). Whereas it did not significantly moderate the mediated effect of parenting stress on

Table 5. Moderated mediation effect of marital relationship satisfaction and family income

Effect	Coefficient Index	SE	LCI	UCI
Moderated Mediation effect of Marital relationship satisfaction				
FS→ FDS→ UPE	.03	.06	.01	.07
WFC→ FDS→ UPE	.01	.07	.03	.09
PS→ FDS→ UPE	.04	.12	.06	.11
Moderated Mediation effect of family Income				
FS→ FDS → UPE	-.03	.04	-.01	-.07
WFC → FDS → UPE	-.01	.06	-.01	-.05
PS → FDS → UPE	-.02	.11	-.05	-.11

Note: FS = Financial Stressors, FDS = Financial Dissatisfaction, UPE = Unemployment Psychological effect, WFC = work-family conflict, PS = Parenting stress, SE = standard error, LCI = lower confidence interval, UCI = Upper confidence Interval

unemployment psychological effect as the index value was beyond the range between lower and upper confidence interval (index = .04, SE = .12, [.06, .11]).

The moderated mediated effect in the case of family income was significant on the mediated relationship of financial stress and work-family conflict with the psychological effect of unemployment via financial dissatisfaction (i.e., index = -.03, SE = .04, [.01, .07] and index = -.01, SE = .04, [-.01, -.05]). On the other hand, the family income did not significantly moderate the mediated relationship of parenting stress with the psychological effect of unemployment via financial dissatisfaction (index = -.01, SE = -.02, [-.05, -.11]) as the index value did not fall between the lower and upper CI.

6. Robustness test

We conducted the following reverse causality test to increase the robustness of our findings. We examined potential substitutable relationships to alleviate the problem of reverse causality. For instance, the financial dissatisfaction may stimulate the financial stress, but the untabulated results were not significant ($\beta = .15, P > .05$). In the same way, unemployment psychological effect may cause a person to be financially dissatisfied, yet again this relationship was insignificant ($\beta = .07, P > .05$). The untabulated results suggest that the proposed relationships are more relevant in the context of the current model.

6.1. Discussion

According to the findings herein, we believe that in the context of unemployment when it comes to psychological impact, the income itself is not necessarily the most important factor. Munsch (2015) revealed the influence of relative income differences between couples on cheating behaviours, as well as the gender differences between men and women in factors related to cheating behaviours. The implications of the social exchange theory in the psychological impacts on unemployed are as follows: the more resources you have in terms of finance and marital strength, the more power you have in coping with the impediments of unemployment, and the lower your vulnerability is to the crisis leading impacts of unemployment.

An additional advantage lies in the significance of elevated financial standing and the quality of marital relationships. Our analysis reveals a compelling outcome: when superior financial and marital dynamics are incorporated into the model, the direct and substantial associations between financial dissatisfaction and the psychological impact of unemployment vanishes entirely. This holds true for income as well. In essence, it implies that by upholding a stable and harmonious foundation within the familial realm, even in the face of numerous events impacting all facets of the family unit, the detrimental economic and psychological consequences of unemployment can be mitigated and embraced with greater resilience. Surprisingly, because of stressful higher paid

jobs, work-family conflict indicates a possibility that income will increase or decrease, which will lead to greater work-family conflict. More work, more promotion and less time with the family; unemployment, no work, and doing nothing at home every day are simultaneously the causes of possible conflicts.

6.1.1. Practical implications

The study has implications for individuals, community members, and policymakers. The study implies that financial stressors and work-life balance are the major determinants of a person's financial dissatisfaction. Such dissatisfaction can be eliminated if collective efforts are implied. For instance, the organizational policymakers may formulate policies regarding the work-life balance through which the individuals have ample time to carry out responsibilities of the two roles efficiently. Moreover, family members should share the household responsibility with the job holders to facilitate the later in carrying out their job activities.

The research findings emphasize the role of quality of marital relationship. The extent to which a person is satisfied from the married life influences the impact of financial stressor on psychological effects via financial dissatisfaction. A highly satisfied person from the marital life will experience the severe psychological impact of financial stressors. The reason is such individuals consider the marital life as a leisure and will decide more time to it. Hence, it is recommended that the individuals keep a balance in enjoying marital life.

7. Conclusion

This study answers important questions. The foremost is "Do economic and family relations affect the psychological impact of unemployment?" The answer is, "yes." The subsequent query is "How do we confirm this?" The answer is, "economic stress leads to dissatisfaction with the financial status and family relationships, which in turn leads to the greater psychological impact of unemployment." Another question is "How does one solve these problems?" The answer is, "deal more effectively with financial and family relationships by focusing on helping to build family status."

The intricate interplay between financial and family relationships presents a realm of substantial research opportunities, and this study serves as a pivotal contribution to expanding our comprehension of how to foster more positive dynamics within these domains for families. The findings underscore the critical imperative for governments and policymakers to prioritize the implementation of comprehensive "enhancing employment" policies, as they have far-reaching implications not only for the predetermined financial outcomes but also for the mental well-being of the unemployed. It thus requires the formulation of necessary public support policies to minimize its negative impact. Due to the changes in the economic environment of the tourism industry, all aspects of the possible reduction of demand, or a pandemic situation, the world's population has stopped moving, coupled with the economic stagnation, the tourism industry is the first and most serious to be impacted, the tourism industry is not in stock, there is no way to reduce sale prices tomorrow, only endless unsold services in the process of using a large number of human resources. In the face of unexpected events, in addition to enterprises which need to do a good job in emergency readiness, the national government should provide more perfect economic support to protect the industry. The tourism industry should be timely insured for the overall product insurance and shutdown insurance. It should also provide unemployment insurance for all employees. In the event of an emergency, expeditious measures can be implemented to prevent owners and employees from being caught off guard in their response to the emergency. In parallel with the exemplary approach taken by countries heavily reliant on tourism, such as Switzerland, it is imperative for the government to adopt a responsive stance encompassing not only the provision of emergency economic measures for the tourism industry but also comprehensive protection measures. Crucially, it is vital to establish a psychological framework that instills confidence among employees, assuring them that both the employers and the state are steadfastly prepared for the enduring battle ahead. By nurturing a sense of reassurance, coupled with diligent care for their families and a steadfast commitment to await their return to work, the outcomes are poised to align with our overarching conclusion. However, it is incumbent upon the owners and the government to extend a greater measure of assistance and support to

these individuals, acknowledging the significance of their collective efforts. As a result, this will also help all tourism industries to maximize the effectiveness of emergency readiness in the face of large-scale emergencies and dealing with a large number of employees.

One limitation herein is that this study has employed constructs, the external validity of which has not been established. The scales are specifically produced for data groups of employees in tourism-related industries. The subsequent use of the scales in other studies with the same and different contexts may establish its external validity. Besides, the construct “financial dissatisfaction” may not have content validity as it addresses only one aspect and does not encompass the structure of financial discontent. In future research, other issues covering other aspects of the structure need to be considered. The analysis is horizontal in nature and, therefore, in order to consolidate the trends and discoveries of this subject, future research should include vertical data.

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