

Research Paper

Quarter-Life Crisis During the Pandemic: Career Indecision, Intolerance of Uncertainty and Mental Well-Being in Emerging Adults

Mrnalini Ranganathan^{1*}, Sameeksha Telang², Dr. Janis Maria Antony³

ABSTRACT

The COVID-19 pandemic has been a period of uncertainty and has had significant psychological impacts on emerging adults, especially in the education and employment sector. This research paper focused on studying the emerging adults in India during the pandemic. The three variables under study are intolerance of uncertainty, mental well-being, and career indecision. The sample consisted of college students across India between the age of 18 and 25. The tools used in this research were the Intolerance of Uncertainty scale- short form (IUS-12), Short-Warwick Edinburgh Mental Well-being Scale (SWEMBS), and Career Decision Scale (CDS). Correlation and Regression methods of analysis were used to examine found significant relationships between intolerance of uncertainty and career indecision and mental well-being and career indecision. Career Indecision mediated the relationship between Intolerance of Uncertainty and Mental Well-being aligning with the concept of Quarter-life crisis.

Keywords: *Intolerance of Uncertainty, Career Indecision, Mental Well-Being, Emerging Adults, COVID 19 Pandemic*

The COVID-19 pandemic broke out in late 2019 and has immediately and in a roundabout way, affected every sphere of life across the world (Malik & Naeem, 2020). While the global focus had majorly been on testing, finding vaccines, and preventing transmission, little importance was given to the psychological problems and mental health of the people. (Varshney et al., 2020). Previous epidemics have triggered huge fear, loneliness, and mental health problems; COVID-19 is inducing comparable results. (Alradhawai et al., 2020). The International Labor Organization released a report in August 2020 titled 'Youth and COVID 19': Impacts on Job, Education and Mental Well-Being. The online survey was conducted between April and May 2020 from 12,000 youth mostly consisting of students across 112 countries. The study revealed that the pandemic could

¹Department of Psychology, CHRIST (Deemed to be University) Bengaluru, Karnataka, India
<https://orcid.org/0000-0002-8168-9879>

²Department of Psychology, CHRIST (Deemed to be University) Bengaluru, Karnataka, India
<https://orcid.org/0009-0007-8679-7944>

³Department of Psychology, CHRIST (Deemed to be University) Bengaluru, Karnataka, India
<https://orcid.org/0000-0002-8630-6830>

*Corresponding Author

Received: September 26, 2023; Revision Received: December 26, 2023; Accepted: December 30, 2023

Quarter-Life Crisis During the Pandemic: Career Indecision, Intolerance of Uncertainty and Mental Well-Being in Emerging Adults

significantly affect the youth population in terms of their education, future career prospects and decisions, and mental well-being. For Mental Well-Being, the tool Short-Warwick Edinburgh Mental Well-Being scale (SWEMWBS) was used. The study found that even before the pandemic, the youth faced problems with the employment crisis. This crisis is increasing during the pandemic and affecting mainly the vulnerable age between 15 and 24. Mental Well-being was lowest for the people between the age of 18-24. Their reduced state of mental well-being might have a long-term detrimental impact on their decisions related to their jobs and education. The future career prospects are also quite bleak with 40% reporting uncertainty. (International Labor Organization, 2020). India has surpassed China to become the most populated country in the world (United Nations, 2023) and it has also the largest youngest population in the world (Government of India, 2022).

The twentysomethings are said to experience extreme uncertainties during school-college-job transition because they are faced with a lot of different options which can make them feel lost and helpless leading to a crisis like situation which leads to lot of other issues such as anxiety, addiction and depression. Quarter-Life Crisis, a theory used to describe this period of transition one experiences in their early adulthood in terms of taking decisions related to career, relationships, and finance, which can cause a panic, is sparked by a feeling of loss and uncertainty and can affect their mental health (Robbins & Wilner, 2001). A study in Turkey reported by Yeler et al. (2021), studied Quarter-life crisis in emerging adults and reported that it was predicted by intolerance of uncertainty and their sample experienced Quarter-life crisis on different levels and in career areas as well. An Indonesian study by Balqis et al. (2023), discussed how quarter-life crisis can make one vulnerable to psychological distress and intolerance of uncertainty.

The young population is the driving force for development in a country and they were faced with two challenges the normal- quarter-life crisis and the new normal – the pandemic and the post pandemic effects. Thus, the individuals who already face a crisis in normal situations might be more affected in these uncertain times.

Mental Well-being

The World Health Organization (n.d.) describes mental well-being as a state in which individuals realize their abilities, cope with the everyday stresses of life, work productively and fruitfully, and contribute to their community and how we respond to life's ups and downs (Peterson, 2018). For instance, how an individual thinks and handles his emotions and acts under different circumstances. The youth's mental well-being is a grave concern, as it is said that 1 out of 10 youth in India is prone to mental health problems (Chadda, 2018).

Intolerance of Uncertainty

Anxiety and Uncertainty were the two main dominant emotional states identified in the emerging adults in the pandemic. (Germani et al., 2020). The pandemic has caused much uncertainty about the future. Intolerance of Uncertainty is the dispositional fear due to emotional difficulties, which results in anxiety in cases where the unknown is perceived intensely (Fergus, 2013, p. 1322). It is expected that the intolerance of uncertainty would be extremely challenging for individuals. (Bakioğlu et al., 2020). Research has shown that Intolerance of Uncertainty might further cause anxiety, depression, and post-traumatic stress disorder. (Cowie et al., 2018). Buhr & Dugas (2002) describe four dimensions of intolerance of uncertainty consisting of inability to take action, stressful and upsetting feelings, that unexpected events will be adverse and should be avoided, and that the uncertainty of the

Quarter-Life Crisis During the Pandemic: Career Indecision, Intolerance of Uncertainty and Mental Well-Being in Emerging Adults

future is unjust. It is found that Intolerance of Uncertainty has received little attention among the youth (Cowie et al. 2018) and thus needs to be studied more among the youth population especially the emerging adults in this pandemic.

Career Indecision

Career indecision can be defined as the problem faced by an individual in order to make a decision related to career and precursor that influences the career choice (Slaney, 1988, as cited in Esters, 2007). Career indecisions usually occur in the college population when they have to decide what they want to do with their career. The young age involves a series of changes in the organization of their life, mainly deciding on a career (Gati et al., 1996). A career decision is not only an individual decision but collectively influenced by many external and internal factors (Bandura, 1986). It may be compromised because of unavoidable circumstances such as natural disasters, pandemic situations, migration because of the unstable situation. (Shanahan et al., 2020). Deciding on a career, according to Bandura's Social Cognitive Theory, are influenced by both cognition and motivation (Bandura, 1994). Thus, many external factors such as societal conditions, cultural background, and economic condition of the family will influence one's career decision, (Bandura, 1986). The beginning of their career can be delayed or even arrested by feelings of uncertainty and insecurity, regarding the current economic and employment crisis (Viola et al., 2017). Therefore, the pandemic might have caused confusion on the career front for individuals about to make career decisions.

REVIEW OF LITERATURE

A review of literature was conducted using key words of mental health, career decisions and uncertainty in youth population considering emerging adults, college population and young adults from studies of developing countries from the year 2020 and the themes were grouped under career indecision, mental well-being, intolerance of uncertainty.

Career Indecision and Mental Well-being

An online survey using a structured questionnaire was conducted on 232 respondents who were mostly final-year college students across various universities in Bangladesh. This sample was chosen because they would be facing the job market in the next 6 to 12 months. They wanted to find whether the Fear of COVID 19 affected their future workforces' career anxiety which was mediated by depression. The data analysis and results confirmed their hypothesis. Thus, the college student's mental health was severely affected, which might influence making decisions on further studies and jobs. (Mahmud et al., 2020).

A longitudinal study with undergraduates and recent graduates was conducted. This study was first published in 1989. The sample size was 124 undergraduates and 157 recent graduates. The independent variable is Career Decidedness, and the dependent variable is aspects of psychological well-being. Career Decidedness and Psychological well-being were significantly related to each, especially with the undergraduates and recent graduate students, and sustaining a career decision led to high levels of well-being. (Arnold, 1989).

This study tries to empirically develop a model to investigate the career decision-making process (search for work self-efficacy- SWSE), lack of readiness, and psychological well-being. The participants are 148 never-employed young Italian adults, and this examines the extent of the search for work self-efficacy and career indecision (Lack of Readiness) and their relationship with psychological well-being. The tools used were a 10-item lack of readiness subscale of the Italian version of the career decision-making difficulties

Quarter-Life Crisis During the Pandemic: Career Indecision, Intolerance of Uncertainty and Mental Well-Being in Emerging Adults

questionnaire, search for work self-efficacy, and an Italian version of the psychological well-being scale. The results were that psychological well-being is positively associated with SWSE but negatively associated with lack of readiness (Viola et al., 2017).

Intolerance of Uncertainty and Career Indecision

Intolerance of Uncertainties affected the college students' career decision in a Korean study. The study was conducted on 226 students in universities positioned in Seoul and Gyeonggi-do. Data were processed, with the use of SPSS WIN Ver.14.0, by simple regression analysis to perceive the impact of Intolerance of Uncertainty on self-efficacy and attitude of career decision making. As a result, it shows that self-efficacy and attitude of career decision making had been affected by intolerance of uncertainty. (유영란, 2010)

The study consisted of studying a mediating role between intolerance of uncertainty and dimensions of the career decision-making process. It consisted of 678 college students. Data were analyzed using path analysis. It showed that Intolerance of uncertainty was directly or indirectly related to the career decisions making process which was lack of readiness, lack of information, and inconsistent information. It said that career choice interventions could be enhanced on coping with the uncertainty involved in career decision making among college students. (Arbona et al., 2021)

Tolerance of Uncertainty should be studied as an essential factor in career theories; the unplanned influences also should be examined. Unplanned influences should also be considered essential elements within the career decision-making process. Moderated mediation analysis turned into carried out on records collected from 321 graduates (175 men, 146 girls) of Korean universities. Results showed that career decision self-efficacy mediated the relationship between happenstance abilities and career satisfaction and Tolerance of uncertainty affected happenstance abilities and career satisfaction via career decision self-efficacy (Kim et al., 2016).

Intolerance of Uncertainty and Mental Well-being

This study was conducted on whether intolerance of uncertainty is related to mental well-being, and whether it is mediated by rumination and fear of COVID-19. The sample comprised 1772 Turkish people (aged between 18 and 73 years) from 79 of 81 towns in Turkey, who finished questionnaires of mental well-being, intolerance of uncertainty, rumination, and fear of COVID-19. Results of serial mediation analyses showed that intolerance of uncertainty had a direct effect on mental wellbeing. Rumination and worry of COVID-19, in the mixture, serially mediated the relation between intolerance of uncertainty and mental wellness (Satici et al.,2020)

This study was conducted on the intolerance to uncertainty and psychological distress in adults during the COVID-19 lockdown. It was conducted using an online questionnaire to determine the predictive factors causing depression and anxiety according to age. 2,871 adults participated in this research and the subcategories include people of age 18-30, 30-50 and above 50. Results showed that young adults have higher levels of uncertainty and anxiety than the older population. Young adults reported lower levels of social contact, living spaces etc. The research states that this distress could be due to the lockdown conditions and it could be explained by intolerance to uncertainty. It also states that young adults are prone to be more sensitive to lockdown conditions and psychological distress. (Glowacz & Schmits, 2020).

Quarter-Life Crisis During the Pandemic: Career Indecision, Intolerance of Uncertainty and Mental Well-Being in Emerging Adults

This study was on psychological inflexibility and intolerance of uncertainty moderate the relationship between social isolation and mental health outcomes. COVID-19. 349 members were recruited. The examination had two recruitment modalities: psychology undergraduates at a Midwestern university and snowball recruitment through expert electronic mail lists and social media websites. Individuals 18 years or older who could read and recognize English and could get the right of entry to the survey online have been blanketed in the observing. The contemporary study explored the moderating position of mental flexibility and related constructs on the relationships among social isolation and intellectual fitness results for the duration of the COVID-19 pandemic. This research shows that the relationship between Increased psychological distress and social isolation was mitigated by psychological flexibility and intolerance of uncertainty during the Covid 19 pandemic. (Smith, et al.,2020).

The research study focuses on the Intolerance of Uncertainty and Mental Health of students who go back to school. Covid 19 has triggered public uncertainty and caused unbearable psychological pressure on students.1017 participants voluntarily provided sociodemographic, characteristics and accomplished the following scales. (IUS_12) Intolerance of uncertainty scale, (SSQ)Social support scale, (GAD-7) the Generalized Anxiety Disorder Scale (PHQ-9) the Patient Health Questionnaire-9, and (ISI-7) the Insomnia Severity Index-7. The results show that the levels of anxiety, depression, and insomnia severity. Findings suggest that college students experienced Intolerances of uncertainty due to mental health issues when they returned to school and improved social guide measures with appreciation to COVID-19 on mental health. (Zhuo, L et al 2021).

Rationale

The results of the literature review indicated that study on emerging adults were quite limited in terms of their intolerance of uncertainty, mental well-being and career indecisions in India. Limited studies also were present on Quarter-life crisis and India during the pandemic. This research needs to be studied in India considering that it has the world's largest number of young population. There is also misinformation being shared through social media which was absent in previous pandemics (Basu et al.,2020). Students' mental health is affected when misinformation is shared about career options and the present situations. Most emerging adults are facing more instability than before due to the current circumstances. They seem to be lacking managing skills when it comes to uncertainty, which may make them feel worried or anxious to get adjusted to small changes in day-to-day life. This may affect their mental well-being, which might further be related to career indecision. According to Bhargava (2019), India has a counseling-deficit education sector which is very challenging with the increase in the youth population. One of the estimates shows that there are nearly 1 lakh professional career coaches, whereas the need is around 15 lakhs to cater to 350 million students. It was also found that nearly 90 % of schools in India do not have career counselors, and there is a shortage of trained career counselors in India. Most studies concerning COVID 19 were conducted during the lockdown period and in the beginning stages of the pandemic. This research could also contribute to the field of career counseling and career psychology as it would help understand the career situation of the youth population. Thus, the results of this study could be used by the policymakers and those working with emerging adults to provide better support for mental health and to form policy by considering the relationship between uncertainty, mental well-being, and career indecision. Several research has focused on the life experiences but there have been limited studies on how this crisis can be quantified. When specific variables are identified it can be understanding how these variables can contribute to quarter-life crisis. It would be useful in

Quarter-Life Crisis During the Pandemic: Career Indecision, Intolerance of Uncertainty and Mental Well-Being in Emerging Adults

measuring aspects quarter-life crisis and considering the large young population of India, would be appropriate to collect data.

Objectives

The objectives of this study are to examine the relationship between intolerance of uncertainty and career indecision, to examine the relationship between mental well-being and career indecision, and to also examine the relationship between intolerance of uncertainty and mental wellbeing. Considering the statement made by Robbins and Wilner (2001) the uncertainties faced by emerging adult in terms of career can cause a crisis has led to formulate the hypothesis that there would be a significant relationship between intolerance of uncertainty and career indecision, a significant relationship between mental well-being and career indecision and a significant relationship between intolerance of uncertainty and mental wellbeing. A mediation analysis would also be conducted to verify Quarter-life crisis.

METHODOLOGY

Research Design

A cross-sectional study using a correlational research design was used for this research. The data was collected by an online survey using google forms which were shared across social media. The data was collected during the period of December 2020 to February 2021 as this was general time when an academic year near closure which would make students think about their next step. A cross-sectional study includes people from different backgrounds, it gives a generalized idea of the results obtained, and as India is a multicultural country, it gives a better understanding of the research problem. An online survey was easy to circulate in a Pandemic situation where going and collecting data in person would have been risky, because of the health risks associated with it. It was easier to reach many people through an online survey as the survey questionnaire could be spread quickly through social media. As both online survey and cross-sectional study took less time and were relatively inexpensive but effective, it was easy to study in a shorter period. Since the hypothesis sought to find a relationship among its variables, a correlational research design is adopted.

Sample

Data was collected using a convenient sampling technique. This sampling technique is applied because a large number of data could be collected in a short period. Also, due to COVID 19 and the pandemic, using other sampling techniques might be challenging, risky, and difficult; hence convenience sampling was used. The population is the youth, and the sample is the emerging adults. The data was collected from college students doing their Undergraduate or Postgraduate degrees and those who are between the age of 18-25 years as per the definition of emerging adulthood given by Arnett (2000). The proposed sample size was of 100 participants. Individuals who have been diagnosed with mental illness for three months and are on therapy or medication and individuals who visit or have undergone professional career counseling were not included in the study as it would influence the results.

Procedure

College students who were doing their final year undergraduate or postgraduate degree and those who fall under the age of 18-25 were approached through social media for this study because college students were likely to make a career decision, and so the data collected would be appropriate. Informed consent was taken from each participant. The participants

Quarter-Life Crisis During the Pandemic: Career Indecision, Intolerance of Uncertainty and Mental Well-Being in Emerging Adults

were required to fill the questionnaires through Google Forms. The collected data was saved in an excel sheet. The relationship among these variables was tested through correlational methods in Jamovi v 2.3.21.

Ethical Consideration

This research was carried out in adherence to the American Psychological Association (APA)'s ethical guidelines and only after the approval from the Institutional Review Board (IRB). An informed consent was given with details on the right to withdraw, confidentiality and anonymity, benefits and risks of the study.

Operational Definitions

- **Mental Well-being:** Mental well-being here would refer to the individual's current state of being and how they are generally feeling and whether they can cope with it. It also includes social well-being, emotional well-being, psychological and intellectual well-being.
- **Intolerance of Uncertainty:** It would refer to whether an individual is tolerant or intolerant while facing uncertainties and how they are coping with the uncertainty in the present and the future. Here the uncertainty would refer to the COVID 19 pandemic as it is an uncertain time and it is uncertain when the pandemic would subside.
- **Career Indecision:** Indecision would refer to whether they have made a decision about their career or are still indecisive about it. Here career would refer to an individual's educational pursuits and future job prospects.

Tools

The tools used for this research were Informed Consent, Socio-Demographic details, Short-Warwick Edinburgh Mental Well-being Scale (SWEMBS), Intolerance of Uncertainty scale-short form (IUS-12) and Career Decision Scale (CDS). All tools were used in regions culturally similar to India and did not contain culture specific questions that would reduce its validity. The short versions were used considering the pandemic but were found to be reliable and valid and similar to its longer versions.

Socio-Demographic details

Socio-demographic details in this study include; name(initials), age, residence, and education qualification.

Intolerance of Uncertainty Scale-short form (IUS 12): R. Nicholas Carleton, M A Peter, J Norton, and Gordon Asmundson developed Intolerance of Uncertainty scale- short form (IUS-12), in 2006 (Carleton et al.,2007). This was a 12-item scale which measured response to uncertainty, ambiguous situation and future (intolerance of uncertainty short form IUS-12, n.d) ranging from 1 to 5 (Intolerance of uncertainty short form IUS-12, n.d.). For Internal consistency, the Cronbach alpha value is 0.85, which shows the high internal consistency, hence this tool has high reliability (Intolerance of uncertainty short form IUS-12, n.d.). It has a Cronbach alpha value of 0.91, which shows high validity and has high construct validity with an already established variety of related concurrent measures (Hale et al.,2016).

Short Warwick -Edinburgh Mental Well-being Scale (SWEMWBS): The second scale, which was used is Short Warwick-Edinburgh Mental Well-being Scale (SWEMWBS). It was developed by researcher NHS Scotland, University of Warwick, and Edinburgh in 2008.

Quarter-Life Crisis During the Pandemic: Career Indecision, Intolerance of Uncertainty and Mental Well-Being in Emerging Adults

It is a 7-item questionnaire with a scale of 1 to 5, which measures mental well-being and emotional well-being, and psychological function (Vaingankar et al.,2017). It had internal consistency Cronbach alpha value is 0.84, which shows high reliability. SWEMWBS and positive mental health showed the strongest positive correlation, which shows that its measures represent psychological and subjective well-being with a coefficient value of 0.779.(Vainagankar et.al,2017).

Career Decision Scale (CDS): The third scale used is the Career Decision Scale which is developed by Samuel H. Osipow, Clarke G, Craney, Jane Winer, Barbara Yanico, and Maryanne Koschier, Columbus OH: Marathon Consulting and Press in 1976 and it is a 19-item scale that measures an individual's degree of career indecisiveness (Allis, 1984). Test-retest reliability of 0.90, which shows high reliability (Esters,2007). It shows 0.82 for career indecision which shows the high validity and found as a valid instrument (Esters,2007).

Data Analysis

Data analysis was done using Jamovi version 2.3.21. In descriptive statistics, the mean and standard deviation of the data obtained were analyzed. By using Inferential Statistics, tests for normality, correlations test, regression test and mediation test was conducted.

RESULTS

A total of 114 responses were collected from December 2020 to February 2021. The collected data underwent cleaning, and duplicate responses, responses that did not fit the inclusion criteria and came under the exclusion criteria were eliminated. After data cleaning, a total of 80 samples were chosen for data analysis. The data was scored. Items were added to obtain scores for Intolerance of Uncertainty, Mental Well-being and Career Indecision. The transformed scores of Mental Well-being along with the other two variables were imported for Data analysis. Using Jamovi v 2.3.21, the data were first analyzed for descriptive statistics, after which inferential statistics were carried out to test the hypothesis. Under descriptive statistics, the mean and standard deviation were calculated for each variable, which is displayed in Table 1 The normality value was also calculated for the values. Since the sample size below 2000, the Shapiro-Wilk test was carried out to test whether it is normally distributed or not normally distributed.

Table 1 Descriptive Statistics and Normality Test

	Intolerance of Uncertainty	Mental Well- being	Career Indecision
Mean	35.4	21.5	36.3
Standard Deviation	7.49	4.15	10.3
W (Shapiro Wilk Test)	0.29	0.059	0.33

Since the variables are all above 0.05, we can reject the null hypothesis for normality testing and conclude that they are normally distributed. Hence a parametric test was carried out. The parametric test for finding correlation is Pearson Correlation. It was carried out to find out the relationship between the variables. The values are displayed in the Table 2.

Quarter-Life Crisis During the Pandemic: Career Indecision, Intolerance of Uncertainty and Mental Well-Being in Emerging Adults

Table 2 Pearson Correlation

	Intolerance of Uncertainty	Mental Well-Being	Career Indecision
Intolerance of Uncertainty	1	-.11	.361**
Mental Well-Being	-.11	1	-.372***
Career Indecision	.361**	-.372***	1

** Correlation is significant at the 0.01 level

*** Correlation is significant at the 0.001 level

Table 3 Regression analysis with Career Indecision as Dependent Variable

Predictor	Estimate	SE	t	p
Intercept	18.804	5.232	3.59	< .001
IU	0.495	0.145	3.42	0.001

Table 4 Regression analysis with Mental Well-Being as Dependent Variable

Predictor	Estimate	SE	t	p
Intercept	26.987	1.598	16.88	< .001
CI	-0.150	0.042	-3.54	<0.01

Relationship between Intolerance of Uncertainty and Career Indecision

The p-value signifies that there is a significant relationship between Intolerance of Uncertainty and Career Indecision. This means that a change in Intolerance of Uncertainty brings about a change in Career Indecision and vice versa. Their strength is moderately Positive. This indicates that as Intolerance of Uncertainty increases, Career Indecision increases. The same was tested using linear regression and Intolerance of Uncertainty significantly predicted Career Indecision which is indicated in Table 3.

Relationship between Mental Well-Being and Career Indecision

Table 2 also indicates that there exists a significant relationship between Mental Well-being and Career Indecision. This means that a change in mental well-being brings about a change in career indecision and vice versa. However, the “-” sign indicates that this relationship is inversely related. This indicates that an increase in career indecision causes a decrease in mental well-being and vice versa. A regression analysis to test the statement whether being indecisive of one’s career can affect their mental well-being was done and Table 4 shows that Career Indecision significantly predicts reduced Mental Well-being.

Relationship between Intolerance of Uncertainty and Mental Well-being

When examining the Intolerance of uncertainty and Mental well-being variables, the p-value > 0.05 indicating that the null hypothesis is valid for this relationship. The changes in Intolerance of uncertainty do not affect the changes in Mental Well-being or vice versa. Hence for this study sample, there is no significant relationship between Intolerance of Uncertainty and Mental Well-e. Hence this hypothesis is rejected.

Quarter-Life Crisis During the Pandemic: Career Indecision, Intolerance of Uncertainty and Mental Well-Being in Emerging Adults

Mediation Analysis

Since Intolerance of Uncertainty and Mental Well-Being were not correlated, a mediation analysis was done to see if it is mediated by CI, A total mediation was reported with CI fully mediating the relationship between IU and MWB

Table 5 CI as Mediator between IU and MWB

Effect	Estimate	SE	Z	p
Indirect	-0.0762	0.031	-2.436	0.015
Direct	0.0149	0.061	0.243	0.808
Total	-0.0612	0.061	-0.996	0.319

DISCUSSION

The emerging adults have to transition from school to college, college to work, and make important decisions related to career and relationships. The pandemic causes an additional burden to this group because they have to decide on their career and job prospects at such a critical period. Many suffered setbacks due to the pandemic, and their future remains a question mark. The change in lifestyle because of the pandemic has much influence on the mental well-being of emerging adults which may further influence their career decision and it may have a long-lasting impact on the future. According to the theory of quarter-life crisis individuals in this age-group go through a lot of changes and transitions which might cause a lot of uncertainties in their career and can result in influencing their decisions resulting in a lot of mental health concerns. This seems to indicate that uncertainty can affect our career which can affect mental health which is consistent with our mediation results. Chen and Zeng (2021), reported that career planning moderated the relationship between intolerance of uncertainty and employment anxiety in college graduates in China which is like our mediation study results that career indecision mediates the relationship intolerance of uncertainty and mental well-being. Balqis et al. (2023), discussed that personal growth initiative can help in dealing with quarter-life crisis as it acts as buffer when faced with uncertainty and help in reducing psychological distress. When the results of this study are compared with Erikson's stage of early adulthood it could be understood in a better way. As Erikson's theory explains the need for dialectical balance between the opposites will help in maintaining good mental health. (Robinson, 2015) If a person has good mental health, then the level of career indecision reduces, and a person can have better tolerance towards uncertainty and fulfill the commitments in early adulthood.

Education and Mental Health Scenario in India

The National Education Policy (NEP) in 2020 has brought uncertainty in the higher education sector which would eventually affect career decisions. The second wave of COVID-19 has increased anxiety and fear among students as the uncertainty increased. It is important to consider the welfare of students during the surge of cases. Students reported learning less in the pandemic due to the online classes, which might also be a factor that might make them worried and thus influence their career decisions. Thus, their school- to work transition is more challenging. (International Labour Organization, 2020). Social distancing and other limitations due to COVID-19 may cause negative psychological conditions such as anxiety and fear, and these may affect the well-being of students and parents (Ozer, 2020, as cited in (Akat & Kartas, 2020). Families may not support their children's learning at home because of the socio-economic status, familial problem, and low

Quarter-Life Crisis During the Pandemic: Career Indecision, Intolerance of Uncertainty and Mental Well-Being in Emerging Adults

level of education among family members. Teachers lacked pedagogical knowledge to implement the online classes which adversely affected the students' learning (Akat & Karatas, 2020). All this will add to intolerance of uncertainty and adversely affect the mental well-being of the students. Many individuals who just started their careers have been left unemployed because of the pandemic. (International Labour Organization,2020) Some might get frustrated and resort to extreme steps such as substance abuse and suicide. As the Covid-19 pandemic has been a challenging and new situation, taking career counseling or any other kind of guidance to form career decisions could reduce the intolerance of uncertainty and increase mental well-being. Career guidance will help individuals to be optimistic, focus on the goal, and focus on the future rather than ruminating on the past. It helps improve mental and emotional well-being, which will help reduce career indecision, and this also helps to withstand difficult situations as career guidance helps in self-controlling (Robertson, 2013). However, it is also important to note that career counselling is an emerging field and there is also a huge presence of unethical practices with no regulatory body for career counselling in India.

Implications

This study will help add knowledge to the field of career counselling and the concept of quarter-life crisis to understand the pandemic's effect on choosing career and higher education options. This study will give insight for students to understand the situation better and to make the proper decision. This study will help the policymakers in terms of forming new policies. This study was conducted after a few months of the initial pandemic period, compared to previous studies which were conducted during the initial period of the Pandemic, so this study focuses on how pandemic has a long-term effect on career decision, intolerance of uncertainty, and mental well-being. This paper attempted to quantify and measure the quarter-life crisis since we have a large young Indian population. It can be now understood that quarter-life crisis which was already a challenge might have been further worsened by the pandemic. The data collected though from a small sample provides a glimpse of the emerging adults at a crucial point in the pandemic.

Limitations

This study had brought so many results which could be used in so the fields of Education and Counselling. But this study has some limitations. As the data for this study was taken online only those who have the privilege to use the internet device and those who know English were included as a sample. Most of the sample included an upper-middle-class of socio-economic background and suburban and urban population. This study included a small sample hence caution should be exercised when generalizing it to the larger population, however the data was collected during a crucial point of time between the first and second waves of COVID 19 pandemic among students who were in a transition period in their career. It was quite difficult to find voluntary participants as the everyone was going through quite difficult times hence the analysis was carried out with the available data to do justice to the people who participated in the study.

Further studies

In the post-pandemic era, the above studies can be replicated to notice any changes. Students from diverse backgrounds can be studied. The sample can include people who are currently studying in India with different educational systems to get more clarity on how various Indian schools boards affect the career decision, intolerance of uncertainty and mental

Quarter-Life Crisis During the Pandemic: Career Indecision, Intolerance of Uncertainty and Mental Well-Being in Emerging Adults

wellbeing. Students who have received career counseling and not received career counseling can be tested to see if there are any differences between them.

CONCLUSION

India must understand the importance of its young population's mental health and consider giving them career guidance. Many countries started career counseling and guidance immediately during the pandemic, which has helped individuals make better career decisions. (Gray et al.,2021) This study indicates that if individuals are screened for their mental well-being and their intolerance to uncertainty it will help them get both career guidance and psychological guidance to manage their mental health. By doing so, they will be able to make better career decisions, improve their mental well-being, and cope with the uncertainty posed by the COVID 19 pandemic.

REFERENCES

- Akat, M. & Karataş, K. (2020). Psychological effects of COVID-19 Pandemic on society and its reflections on education. *Turkish Studies*, 15(4), 1-13. <https://dx.doi.org/10.7827/TurkishStudies.44336>
- Allis, M. R. (1984). Career Decision Scale. *Measurement and Evaluation in Counseling and Development*, 17(2), 98–100. <https://doi.org/10.1080/07481756.1984.12022753>
- Alradhawi, M., Shubber, N., Sheppard, J., & Ali, Y. (2020). Effects of the COVID-19 pandemic on mental well-being amongst individuals in society- A letter to the editor on "The socio-economic implications of the coronavirus and COVID-19 pandemic: A review". *International journal of surgery (London, England)*, 78, 147–148. <https://doi.org/10.1016/j.ijso.2020.04.070>
- Arbona, C., Fan, W., Phang, A., Olvera, N., & Dios, M. (2021). Intolerance of Uncertainty, Anxiety, and Career Indecision: A Mediation Model. *Journal of Career Assessment*. <https://doi.org/10.1177/10690727211002564>
- Arnett, J. J. (2000). Emerging adulthood: A theory of development from the late teens through the twenties. *American Psychologist*, 55(5), 469–480. <https://doi.org/10.1037/0003-066X.55.5.469>
- Arnold, J. (1989). Career decidedness and psychological well-being: A two-cohort longitudinal study of undergraduate students and recent graduates. *Journal of Occupational Psychology*, 62(2), 163–176. <https://doi.org/10.1111/j.2044-8325.1989.tb00487.x>
- Balqis, A. I., Karmiyati, D., Suryaningrum, C., & Akhtar, H. (2023). Quarter-life crisis: Personal growth initiative as a moderator of uncertainty intolerance in psychological distress. *Psikohumaniora*, 8(1), 19–34. <https://doi.org/10.21580/pjpp.v8i1.13527>
- Bakioğlu, F., Korkmaz, O., & Ercan, H. (2020). Fear of COVID-19 and Positivity: Mediating Role of Intolerance of Uncertainty, Depression, Anxiety, and Stress. *International Journal of Mental Health and Addiction*, 1–14. <https://doi.org/10.1007/s11469-020-00331-y>
- Bandura, A. (1994). *Self-Efficacy - Encyclopedia of Human Behavior* (V.S. Ramachandran ed., Vol. 4). Academic Press. (Reprinted in H. Friedman [Ed.], *Encyclopedia of Mental Health*. Academic Press, 1998)
- Bandura, A.(1986). *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, NJ: Prentice-Hall.
- Basu, A., Roy, A., Hazra, A. K., & Pramanick, K. (2020). Analysis of Youths' Perspective in India on and During the Pandemic of COVID-19. *Social Science Quarterly*, 101(5), 1969–1978. <https://doi.org/10.1111/ssqu.12839>
- Bhargava P.(2019, September 26). *Why India Needs about 1.5 million Career Counselors?* Higher Education Digest <https://www.highereducationdigest.com/why-india-needs-about-1-5-million-career-counselors/>

Quarter-Life Crisis During the Pandemic: Career Indecision, Intolerance of Uncertainty and Mental Well-Being in Emerging Adults

- Buhr, K., & Dugas, M. J. (2002). The intolerance of uncertainty scale: Psychometric properties of the English version. *Behavior Research and Therapy*, 40(8), 931–946. [https://doi.org/10.1016/s0005-7967\(01\)00092-4](https://doi.org/10.1016/s0005-7967(01)00092-4).
- Career Decision Scale - IResearchNet. (2016, February 4). Psychology. <http://psychology.iresearchnet.com/counseling-psychology/career-assessment/career-decision-scale/#:%7E:text=The%20Career%20Decision%20Scale%20>
- Carleton, R. N., Norton, M. A. P. J., & Asmundson, G. J. G. (2007). Fearing the unknown: A short version of the Intolerance of Uncertainty Scale. *Journal of Anxiety Disorders*, 21(1), 105–117. <https://doi.org/10.1016/j.janxdis.2006.03.014>
- Chadda, R. (2018). Youth & mental health: Challenges ahead. *Indian Journal of Medical Research*, 359–361. https://doi.org/10.4103/ijmr.IJMR_1585_18
- Chen, L., & Zeng, S. (2021). The relationship between intolerance of uncertainty and employment anxiety of graduates during COVID-19: The Moderating role of Career Planning. *Frontiers in Psychology*, 12. <https://doi.org/10.3389/fpsyg.2021.694785>
- Cowie, J., Clementi, M. A., & Alfano, C. A. (2016). Examination of the Intolerance of Uncertainty Construct in Youth with Generalized Anxiety Disorder. *Journal of Clinical Child & Adolescent Psychology*, 47(6), 1014–1022. <https://doi.org/10.1080/15374416.2016.1212358>
- Esters, L. (2007). Career Indecision Levels of Students Enrolled in A College of Agriculture and Life Sciences. *Journal of Agricultural Education*, 48(4), 130–141. <https://doi.org/10.5032/jae.2007.04130>
- Fergus, T. A. (2013). A comparison of three self-report measures of intolerance of uncertainty: An examination of the structure and incremental explanatory power in a community sample. *Psychological Assessment*, 25(4), 1322–1331. <https://doi.org/10.1037/a0034103>
- Gati, I., Krausz, M., & Osipow, S. H. (1996). A taxonomy of difficulties in career decision making. *Journal of Counseling Psychology*, 43(4), 510–526. <https://doi.org/10.1037/0022-0167.43.4.510>
- Government of India. (2022, June 28). *Youth In India 2022*. Ministry of Statistics and Programme Implementation. Retrieved September 1, 2023, from https://mospi.gov.in/sites/default/files/publication_reports/Youth_in_India_2022.pdf
- Germani, A., Buratta, L., Delvecchio, E., Gizzi, G., & Mazzeschi, C. (2020). Anxiety Severity, Perceived Risk of COVID-19 and Individual Functioning in Emerging Adults Facing the Pandemic. *Frontiers in Psychology*, <https://doi.org/10.3389/fpsyg.2020.567505>
- Glowacz, F., & Schmits, E. (2020). Psychological distress during the COVID-19 lockdown: The young adults most at risk. *Psychiatry Research*, 293, 113486. <https://doi.org/10.1016/j.psychres.2020.113486>
- Godinic, D., Obrenovic, B., & Khudaykulov, A. (2020). Effects of Economic Uncertainty on Mental Health in the COVID-19 Pandemic Context: Social Identity Disturbance, Job Uncertainty, and Psychological Well-Being Model. *International Journal of Innovation and Economic Development*, 6(1), 61–74. <https://doi.org/10.18775/ijied.1849-7551-7020.2015.61.2005>
- Gray, M. A., Kim, M., & Lee, S. (2021). Simplifying the Measurement of College Students' Career Planning: The Development of Career Student Planning Scale during the COVID-19 Pandemic. *Experimental Results*, 2, 41–42. <https://doi.org/10.1017/exp.2020.69>
- Hale, W., Richmond, M., Bennett, J., Berzins, T., Fields, A., Weber, D., Beck, M., & Osman, A. (2016). Resolving Uncertainty About the Intolerance of Uncertainty Scale–12: Application of Modern Psychometric Strategies. *Journal of Personality Assessment*, 98(2), 200–208. <https://doi.org/10.1080/00223891.2015.1070355>

Quarter-Life Crisis During the Pandemic: Career Indecision, Intolerance of Uncertainty and Mental Well-Being in Emerging Adults

- International Labour Organization (2020, August) *Youth and COVID 19: Impacts on Job, Education, Rights, and Mental well being*. https://www.ilo.org/wcmsp5/groups/public/---ed_emp/documents/publication/wcms_753026.pdf
- Intolerance of Uncertainty Scale - Short Form (IUS-12) | Measurement Instrument Database for the Social Sciences*. (n.d.). Measurement Instrument Database for the Social Sciences. Retrieved October 5, 2020, from <https://www.midss.org/content/intolerance-uncertainty-scale-short-form-ius-12>
- Ketogenic, A., Basch, C. H., Sullivan, M., & Davi, N. K. (2020). The impact of the COVID-19 epidemic on the mental health of undergraduate students in New Jersey, cross-sectional study. *PLOS ONE*, 15(9), e0239696. <https://doi.org/10.1371/journal.pone.0239696>
- Kim, B., Rhee, E., Ha, G., Yang, J., & Lee, S. M. (2016). Tolerance of Uncertainty: Links to Happenstance, Career Decision Self-Efficacy, and Career Satisfaction. *The Career Development Quarterly*, 64(2), 140–152. <https://doi.org/10.1002/cdq.12047>
- Kwok, C. Y. N. (2018). Managing uncertainty in the career development of emerging adults: Implications for undergraduate students. *Managing Uncertainty in the Career Development of Emerging Adults: Implications for Undergraduate Students*, 27(3), 137–149. <https://doi.org/10.1177/1038416217744216>
- Mahmud, M. S., Talukder, M. U., & Rahman, S. M. (2020). Does ‘Fear of COVID-19’ trigger future career anxiety? An empirical investigation considering depression from COVID-19 as a mediator. *International Journal of Social Psychiatry*, 002076402093548. <https://doi.org/10.1177/0020764020935488>
- Malik, S., & Naem, K. (2020, May). *Impact of COVID-19 Pandemic on Women: Health, livelihoods & domestic violence*. Sustainable Development Policy Institute. <https://doi.org/10.2307/resrep24350>
- Meyer, B. W. (1987, August). THE CAREER DECISION SCALE AS A MEASURE OF CHRONIC INDECISION. *Texas Tech University*. <https://ttu-ir.tdl.org/bitstream/handle/2346/10596/31295005243034.pdf?sequence=1&isAllowed=y>
- Peterson, T. (2018, May 12). What Is Mental Wellbeing? Definition and Examples, Healthy Place. Retrieved on 2020, September 24 from <https://www.healthyplace.com/self-help/self-help-information/what-mental-wellbeing-definition-and-examples>
- Robbins, A., & Wilner, A. (2001). *Quarterlife Crisis: The Unique Challenges of Life in Your The twenties* (1st ed.). TarcherPerigee. https://www.google.co.in/books/edition/Quarterlife_Crisis/0o2ams7Shwsc?hl=en&gbpv=1&dq=quarter-life+crisis&printsec=frontcover
- Robertson, P. J. (2013). The well-being outcomes of career guidance. *British Journal of Guidance & Counselling*, 41(3), 254–266. <https://doi.org/10.1080/03069885.2013.773959>
- Statici, B., Saricali, M., Satıcı, S. A., & Griffiths, M. D. (2020). Intolerance of Uncertainty and Mental Wellbeing: Serial Mediation by Rumination and Fear of COVID-19. *International Journal of Mental Health and Addiction*, <https://doi.org/10.1007/s11469-020-00305-0>
- Short Warwick-Edinburgh Mental Wellbeing Scale*. (n.d.). Child Outcomes Research Consortium (CORC). Retrieved October 13, 2020, from <https://www.corc.uk.net/outcome-experience-measures/short-warwick-edinburgh-mental-wellbeing-scale/>
- Smith, B. M., Twohy, A. J., & Smith, G. S. (2020). Psychological inflexibility and intolerance of uncertainty moderate the relationship between social isolation and mental health outcomes during COVID-19. *Journal of Contextual Behavioral Science*, 18, 162-174. <https://doi.org/10.1016/j.jcbs.2020.09.005>
- United Nations. (2023, April 24). *India overtakes China as the world’s most populous country*. Department of Economic and Social Affairs. Retrieved September 1, 2023, from <https://www.un.org/development/desa/dpad/wp-content/uploads/sites/45/PB153.pdf>
- Vaingankar, J. A., Abdin, E., Chong, S. A., Sambasivam, R., Seow, E., Jeyagurunathan, A., Picco, L., Stewart-Brown, S., & Subramaniam, M. (2017). Psychometric properties of the short Warwick Edinburgh mental well-being scale (SWEMWBS) in service users with

Quarter-Life Crisis During the Pandemic: Career Indecision, Intolerance of Uncertainty and Mental Well-Being in Emerging Adults

- schizophrenia, depression, and anxiety spectrum disorders. *Health and Quality of Life Outcomes*, 15(1), <https://doi.org/10.1186/s12955-017-0728-3>
- Varshney, M., Parel, J. T., Raizada, N., & Sarin, S. K. (2020). The initial psychological impact of COVID-19 and its correlates in Indian Community: An online (FEEL-COVID) survey. *PLOS ONE*, 15(5), e0233874. <https://doi.org/10.1371/journal.pone.0233874>
- Viola, M. M., Musso, P., Ingoglia, S., Lo Coco, A., & Inguglia, C. (2017). Relationships between career indecision, search for work self-efficacy, and psychological well-being in Italian never-employed young adults. *Europe's Journal of Psychology*, 13(2), 231–250. <https://doi.org/10.5964/ejop.v13i2.1277>
- World Health Organization. (n.d.). *Promotion of mental well-being*. World Health Organization - South-East Asia Regional Office. Retrieved October 8, 2020, from http://origin.searo.who.int/entity/mental_health/promotion-of-mental-well-being/en/#:%7E:text=The%20World%20Health%20Organization%20describes,to%20his%20or%20her%20community1.
- Yeler, Z., Berber, K., Özdoğan, H. K. & Çok, F. (2021). Quarter Life Crisis among Emerging Adults in Turkey and Its Relationship with Intolerance of Uncertainty. *Turkish Psychological Counseling and Guidance Journal*, 11(61), 245-262. Retrieved from <https://dergipark.org.tr/en/pub/tpdrd/issue/63470/960767>
- Zhai, Y., & Du, X. (2020). Addressing collegiate mental health amid COVID-19 pandemic. *Psychiatry Research*, 288, 113003. <https://doi.org/10.1016/j.psychres.2020.113003>
- Zhuo, L., Wu, Q., Le, H., Li, H., Zheng, L., Ma, G., & Tao, H. (2021). COVID-19-Related Intolerance of Uncertainty and Mental Health among Back-To-School Students in Wuhan: The Moderation Effect of Social Support. *International Journal of Environmental Research and Public Health*, 18(3), 981. <https://doi.org/10.3390/ijerph18030981>
- 유영란. (2010). The effect of intolerance of uncertainty, self-efficacy, and attitude of career decision making in college dance student. *The Korean Journal of Dance Studies*, 30(30), 115–138. <https://doi.org/10.16877/kjds.30.30.201008.115>

Acknowledgment

The author(s) appreciates all those who participated in the study and helped to facilitate the research process.

Conflict of Interest

The author(s) declared no conflict of interest.

How to cite this article: Ranganathan, M., Telang, S. & Antony, J.M. (2023). Quarter-Life Crisis During the Pandemic: Career Indecision, Intolerance of Uncertainty and Mental Well-Being in Emerging Adults. *International Journal of Indian Psychology*, 11(4), 2648-2662. DIP:18.01.248.20231104, DOI:10.25215/1104.248