# UNEMPLOYMENT STRESS AND SUICIDAL IDEATION AMONG ADULTS: ROLE OF COGNITIVE APPRAISAL

 $\mathbf{BY}$ 

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# NATIONAL UNIVERSITY OF MODERN LANGUAGES ISLAMABAD

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# UNEMPLOYMENT STRESS AND SUICIDAL IDEATION AMONG ADULTS: ROLE OF COGNITIVE APPRAISAL

By

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The undersigned certify that they have read the following thesis, examined the defense, are satisfied with the overall exam performance, and recommend the thesis to the Faculty of Social Sciences for acceptance.

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Candidate of <u>MPhil Applied Psychology</u> at the National University of Modern Languages do hereby declare that the thesis <u>"Unemployment Stress and Suicidal Ideation among Adults: Role of Cognitive Appraisal"</u> submitted by me in partial fulfillment of MPhil degree, is my original work, and has not been submitted or published earlier. I also solemnly declare that it shall not, in future, be submitted by me for obtaining any other degree from this or any other university or institution.

I also understand that if evidence of plagiarism is found in my thesis/dissertation at any stage, even after the award of a degree, the work may be cancelled, and the degree revoked.

\_\_\_\_

Maheen Aurangzeb

19th June, 2023

#### **ABSTRACT**

Unemployment is very stressful for adults as it causes negative thoughts and affects the cognition of a person. The main objective of the present study was to explore the associations between unemployment stress and suicidal ideation among adults and to investigate the mediating role of cognitive appraisal styles in this relationship. The sample of the study comprised 300 unemployed adults (males = 200, females = 100) with an age ranged from 23-50 years (M = 28.82, SD = 4.77). Data was collected following purposive convenient sampling technique from different universities of Rawalpindi and Islamabad and also from personal contacts of the researcher. Unemployment stress scale was developed in the present study. The scale was developed by reviewing the literature to measure stress that adults feel during unemployment. Then five focus group discussions were held with unemployed people and after that pool of items were generated. Further scale was critically reviewed by subject matter experts and 40 items were finalized and then used for pilot testing. For other study variables, existing scales were used. To measure suicidal ideation of unemployed adults, Suicidal Ideation Attribution Scale was used developed by Spijker et al., (2014) and to measure cognitive appraisal of unemployed adults, Cognitive Appraisal Style Scale was used developed by Skinner and Brewer (2002). Findings of the study revealed that the unemployment stress had significant positive correlations with suicidal ideation (p<.01). Challenge cognitive appraisal showed negative whereas threat cognitive appraisal showed positive correlation with unemployment stress and suicidal ideation (p<.01). Findings of mediation analysis shows indirect significant effect of challenge cognitive appraisal (R<sup>2</sup>= .43), whereas there is indirect significant effect of threat cognitive appraisal mediating factor between unemployment stress and suicidal ideation (R<sup>2</sup>= .40). Results have been discussed in the light of previous literature and cultural contexts.

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# **DEDICATION**

This thesis is dedicated to my parents for their love, endless support and also dedicated to my supervisor for her guidance, support and encouragement..

#### Chapter 1

#### 1. INTRODUCTION

Unemployment is not limited to a single country. Globally, it occurs in almost all nations. Across countries, unemployment impacts vary in severity and in how they deal with it. The problem of unemployment in Pakistan and other parts of the world is on the rise, because the increase in the labor market is more than the increase in the job availabilities. Due to which people are facing the consequences not only financial but physical and psychosocial as well. Considering the potential and devastating outcomes of unemployment, the present study investigates the relationship of unemployment stress and suicidal ideation among adults. Further, cognitive appraisal is measured as a mediator in this relationship.

The term unemployment refers to the situation where a person actively searches for employment but is unable to find work. It should be differentiated with unstable employment and joblessness. Unstable employment refers to a situation in which someone works in a job that may not be permanent because it is a temporary contract, is in an industry that is experiencing financial problems where as joblessness refers to the state of being without a job (ILO, 2020).

The ratio of unemployed people, in developed as well as in developing countries is expanding currently than at any other time. A study by the International Labor Organization (ILO) in 1990 found that in 2017, 192.7 million people were unemployed and 192.3 million were unemployed in 2018 and in 2019, 193.6 million were unemployed worldwide. According to estimate of Africa, 37.8 million people were unemployed in 2017 whereas in 2018 the ratio was 37.9 million and in 2019, 40.1 million were unemployed (Kuhn, 2018).

In spite of the increase in unemployment, not all sectors of society are experiencing it equally. Despite the fact that the unemployment rate was 5.1 percent in January 2021, the rates for young people aged 18 to 24 (14.0 percent), those with less ability (7.8 percent), and members of minority ethnic groups were all higher (7.6 percent) and 43 percent of unemployed people have poor emotional health in January 2021 worldwide. This was more noteworthy than for individuals in work (27%) and for individuals who were on leave and not present at workplace for any reason (34%). This suggested that employed individual have less stress and good emotional health whether he laid off from workplace for time being (International Labor Organization, 1990).

In Pakistan, the rate of unemployment is significantly higher on average by 2 percentage points. Overall rate of unemployment is high in Pakistan ranging from a low of 6.3 percent in 2007-2008 to a peak of 8.9 percent in 2003-2004. These estimates are more in line with the relatively low growth in Pakistan's economy. It is interesting that the unemployment rate ranges from 8 to 9 percent in six out of the eight years (Arif & Chaudhry, 2008).

COVID-19 pandemic has had calamitous effects on countless aspects of the world. According to ILO, 5 percent of employed women lost their jobs due to the pandemic as compared to 3.9 percent of the men (ILO, 2020). Multiple and overlapping economic and political crises are threatening labour market recovery around the world. These crises are likely to further increase labour market inequalities due to the disproportionate impact on certain groups of workers and firms, while contributing to a growing divergence between developed and developing economies (ILO, 2020). The COVID-19 epidemic, according to (Nasir et al., 2020) millions of people faced job losses across the country. Because of the

slowdown in the economic activity, which has placed employment in a precarious situation, there was a significant increase in poverty and unemployment (Sareen, 2020). According to a PIDE report, approximately 12.3 million people are expected to face unemployment under a scenario of moderate restrictions by the government (Nasir et al., 2020).

The coronavirus disease (COVID-19) pandemic has created a major mental health challenge throughout the world. These psychiatric sufferings are also accounted for about 90% of the global suicide occurrences in the extreme cases (Mamun & Griffiths, 2020). Based on the previous researches of COVID-19 suicide cases, it is clear evident that most of the Pakistani cases of suicide occur due to the lockdown-related economic recession. Although previous case studies from the Pakistan neighborhood countries, such as in Bangladesh and in India, the first COVID-19 suicides are reported to be due to fear of infection and social boycott (Goyal et al., 2020; Mamun & Griffiths, 2020).

It has been difficult to evaluate how the pandemic has affected the workplace because of standard business metrics, such as brief closures of regions and the transition to reduced hours. Also other factors like holidays do not adequately capture pandemic action and unemployment. Even with these initiatives, the unemployment rate increased from 3.8 percent in the three months leading up to November 2019 to 5.0 percent a year later. Regardless pandemic recovery an increase in unemployment is expected. The high adult unemployment rate exceeded 20% in 2010 (US Department of Labor force, 2014).

It was a serious overall chronic condition (Erk et al., 2010). Negative feelings and attitudes may result from the potential environmental stressor of unemployment as well as the developmental stressor of reaching young adulthood. However, there are few studies on

young adult unemployment and depression (Bradshaw et al., 2012). For example (Brown et al., 2003) individuals aged 18 to 25 participated in the past research of consecutive psychological stress and unemployment. In previous studies, young adults who were not married (24.6 percent) reported high unemployment stress than those who were married (12.8 percent) (Galambos et al., 2006).

Each month, the US Bureau of Labor Statistics (BLS) estimates the unemployment rate using data from two different surveys. The first one is the establishment report. In this survey, a randomly selected group of employers are asked about the number of their payrolls. The second one is the current population survey. For the study of this survey, the Bureau of Labor Statistics performs a family overview of 60,000 families (running in area and geology) and collects data on each qualified person's business status. After the information is acquired with the Establishment Report and the Current Population Survey, the Bureau of Labor Statistics provides the Employment Report, which includes the unemployment figures for that month (Krugman, 2021).

The International Labour Organization (ILO) (1990) states that there are three criteria used to assess unemployment i.e. not working, available for work, and looking for work. However, depending on whether the nation is developed or developing, this definition varies. When the labour market is well-organized and labour absorption is sufficient, unemployment in developed countries is measured using the official standard of the seeking employment criterion. This also includes making determined attempts to get employment during the specified reference period (Hussmanns, 1990). Ethiopia, a developing country where there is a deficiency of product information and work engagement is low. The employees are predominantly self-employed. They set very high standards in their mind. They look for

better opportunities and did not work with common industries. In most agricultural countries, the estimate of unemployment is through the lack of availabilities of jobs in the country and from the ratio of the people who are not working (Mckee et al., 2005).

In past studies of stress, unemployment is viewed as one of the factor that completely changes the life conditions. Unemployment had worst impact on person's life and totally changes the mental condition of the person (Wheaton & Montazer, 2009). On a profound level, people experience pessimistic or good sentiments regarding their unemployment status, addressed by the pessimistic and optimistic discernment aspects, individually. These two inconsistent sentiments, which are reasonably related with one another, appear to show contradicting yet concurrent (not consecutive) sentiments about being unemployed (substituting times of pessimistic and good sentiments). Hence, these present circumstances can hurtfully affect unemployed individuals however it is important to provide opportunities to unemployed person so their potential can be assessable in the profession (Pignault & Houssemand, 2017).

Unemployment can impact emotional health issues including stress (McGee & Thompson, 2015). It is more harmful for young adults to experience such antagonistic mental stress effects. Likewise, a U.S. public review utilizing information from the National Longitudinal Study of adults. That data showed that there was higher level of stress due to unemployment during young adulthood which led to depression later in life (Mossakowski, 2009). In past cross-sectional studies, it was examined that individuals with low socioeconomic status (SES), less salary and minimum education had higher levels of stress. As they did not had high education to meet the criteria for a high reputable job (Cohen & Williamson, 1988). It has also been suggested that these individuals (low socioeconomic

status) have high level of stress as compared to high socioeconomic status individuals (Aneshensel, 1992). Apart from these socioeconomic stressors and related outcome, unemployment itself is an adversity of life which causes serious psychosocial problems including mental health issues and social conflicts in one's life. The currents study, therefore, is an effort to investigate the indirect effect of unemployment stress on suicidal ideation via cognitive appraisal.

#### 1.1 Rationale

The main study's objective is to address knowledge gaps in the areas of cognitive appraisal and suicidal ideation in relation to unemployment stress. Previous studies (i.e., Bradshaw et al., 2012) have shown a link between unemployment stress and depression; however, very little research has been focused on the consequent suicidal ideation in relation to stress of unemployment. Moreover, the role of a very important factor i.e. cognitive appraisal has also been largely ignored in this domain. In Pakistan, it is important to study the unemployment stress, as it makes different psychological effects on adult. Pakistan is unfortunately facing serious socio-political instability which is further fueled by economic turmoil. Economic downfall has raised the ratio of unemployment as many of the people have become jobless and many are deprived of any opportunity of employment. COVID-19 was another factor which aggravated the economic crises and unemployment. People have become hopeless and helpless and have developed serious mental health issues out of this adversity. As part of this research, the level of cognitive appraisal is examined in relation to suicide ideation. To accomplish this, unemployed adults with stress were chosen as a sample. They are measured on suicidal ideation and cognitive appraisal style (i.e. challenge cognitive appraisal style and threat cognitive appraisal style). Cognitive Appraisal (i.e. Challenge cognitive appraisal style and threat cognitive appraisal style) works as a mediator between unemployment stress and suicidal ideation. As unemployment is a serious issue now a day, it is important to consider the associated stress with it. So, the present study focuses on the people who are unemployed and having stress for a minimum period of one year.

This study will be valuable for the researchers in many ways. As there was no scale available in the previous studies to measure unemployment stress so the current study makes an effort to provide an understanding of the concepts of unemployment stress and developed an instrument for it. This scale has developed in English version and can be used in every context. Moreover the study is aimed to further knowledge on how cognitive appraisal plays a mediating role in relationship between unemployment stress and suicidal ideation among adults.

The current study's objective was to examine whether there is an association between adult suicidal ideation and unemployment stress. Previous studies showed that the stress of unemployment might be linked to a higher likelihood of suicide ideation (Glenn et al; 2018). Furthermore the present study also helps the researchers to know that how cognitive appraisal styles increase/ decrease the risk of suicidal ideation. In past study it was demonstrated that positive cognitive styles associated with high levels of subjective and psychological well-being and provide resilience against suicidal ideation. In contrast negative cognitive appraisal styles increase the risk of suicidal ideation (Miranda, 2005).

This study also explains the importance of cognitive appraisal in unemployment stress. The thinking of unemployed person becomes maladaptive and the way a person cope with his/ her problem is very important. Past studies have considered cognitive appraisal as a key factor in stress reactions. As during unemployment a person feels stress as he / she

appraises his / her situation (Feather & Davenport, 1981; Gowan et al; 1999; Leana & Feldman, 1998).

Primary cognitive appraisal, such as the perceptions of threat and challenge, affect people differently as shown in earlier studies. For instance, threat cognitive appraisal leads to be related to negative outcomes, such as low coping expectations and anxiety (Lazarus & Folkman, 1984; Sarason & Sarason, 1990; Skinner & Brewer, 1999), whereas challenge cognitive appraisal leads to be related to positive outcomes, such as satisfaction and pleasure because of the perceived ability associated with overcoming problems and excitement in anticipation of personal advantages (Lazarus & Folkman, 1984).

#### **1.2 Statement of the Problem**

A significant contributor to social stress is unemployment, which can lead to increased family issues, social isolation, and a reduction in confidence and self-worth. Additionally, unemployment stress involves a lack of social contact and activity and usually leads to the loss of social bonds (Brown et al., 2000). Furthermore, prior research demonstrates a relationship between the stress of unemployment and suicide thoughts (Glenn et al; 2018). The researchers hypothesized that stress related to unemployment had increased the probability of suicidal ideation (Cummins, 2015). The issue of unemployment in adult groups is worsening, as it is the reality of its mental and social effects on individuals and society. So, an analyst searched for arrangements according to the point of view of positive cognitive study to beat the adverse consequences of unemployment burden on the emotional wellness of people and focuses on the positive aspects of unemployment rather than on negative aspects of stressful situation (Arnout, 2019).

#### 1.3 Research Objectives

The aim of the present study is to accomplish the following objectives:

- To measure the relationship between unemployment stress, suicidal ideation and cognitive appraisal among adults.
- To examine the mediating role of cognitive appraisal in relationship between unemployment stress and suicidal ideation among adults.
- To examine the role of demographics on unemployment stress, suicidal ideation and cognitive appraisal among adults.

#### 1.4 Research Questions

Q1: How does unemployment effect suicidal ideation among adults?

Q2: How does unemployment effect cognitive appraisal among adults?

Q3: Does unemployment stress and cognitive appraisal style predicts suicidal ideation?

**Q4:** What role cognitive appraisal plays between unemployment stress and suicidal ideation among adults?

#### 1.5 Null Hypotheses

H1: There is no relationship between unemployment stress, suicidal ideation and threat cognitive appraisal style among adults.

H2: There is no relationship between unemployment stress and challenge cognitive appraisal style among adults.

H3: There is no relationship between suicidal ideation and challenge cognitive appraisal style among adults.

H4: Threat cognitive appraisal has no association between unemployment stress and suicidal ideation among adults.

H5: Challenge cognitive appraisal has no association between unemployment stress and suicidal ideation among adults.

#### 1.6 Research Hypotheses

H1: There is positive relationship between unemployment stress, suicidal ideation and threat cognitive appraisal style among adults.

H2: There is negative relationship between unemployment stress and challenge cognitive appraisal style among adults.

H3: There is negative relationship between suicidal ideation and challenge cognitive appraisal style among adults.

H4: Threat cognitive appraisal mediates the relationship between unemployment stress and suicidal ideation among adults.

H5: Challenge cognitive mediates the relationship between unemployment stress and suicidal ideation among adults.

#### 1.7 Conceptual Model of the Study

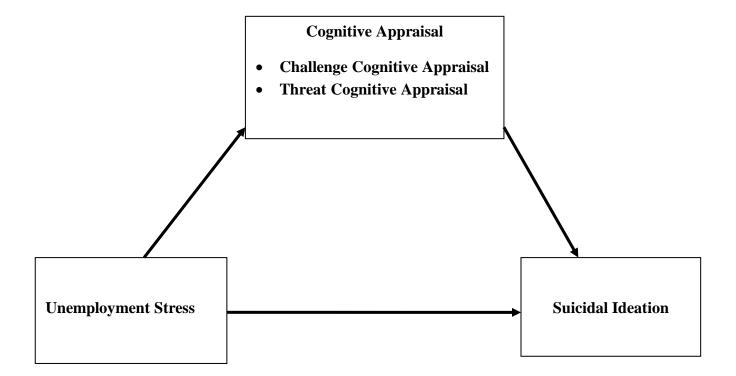


Figure 1. Figure 1 showing the relationship of unemployment stress and suicidal ideation among adults along with the role of cognitive appraisal.

#### 1.8 Significance of the Study

In January 2021, the prevalence of unemployment rate from adult population aged between 18 and 64, varied by categories. The likelihood of unemployment was higher for younger people, men, those from minority ethnic groups, and workers with lower levels of education. While the unemployment rate was lower prior to the pandemic, the probability of unemployment for various groups was comparable (Krugman, 2021). In the European Union in 2016, Spain had the second-highest unemployment rate. There had fluctuations in suicide mortality is produced by social events i.e. lack of employment and examined that unemployment is related directly and indirectly to suicidal risk. Blakely (2003) found an

association between unemployment and suicide. Their study results shows that the association between unemployment and suicide is not only due to interrupting factors associated to the social and economic status and that it is only related to mental disorders such as depression and anxiety cause increase of suicidal ideation. Longitudinal studies review that unemployment leads to depression which provokes suicidal ideation (Dooley et al; 2003).

#### 1.9 Methodology

To incorporating this study, different ways are used. A thorough literature was reviewed and retained about unemployment stress and unemployed people and found their statistics. Different published articles were reviewed. The data was gathered from unemployed people by using purposive convenient sampling technique. Moreover, the present research was conducted in three phases i.e. development of the instrument (a scale was devised in the present study), pilot study and the main study. At the end, results, limitations and implications were discussed and few suggestions were given.

#### 1.10 Delimitations

In the present study, only unemployed adults were taken as a sample age range between 23-50. Other age groups, underemployed and employed individuals were not considered in this research.

#### 1.11 Operational definitions

**1.11.1. Unemployment Stress.** Unemployment Stress is defined as the mental strain that can be caused by external forces or by internal perceptions of the individuals that how

he/ she perceives unemployment period (Babore et al., 2020). The person who scores high on unemployment stress scale were considered having more unemployment stress as compared to the person having low score on unemployment stress scale.

1.11.2. Suicidal Ideation. Suicidal ideations (SI), often known as suicidal thoughts or ideas, is a general term for a variety of feelings, desires, and obsessions with death and suicide. While some definitions of suicidal ideation include suicide planning deliberations, but other people view planning as a discrete stage (APA, 2016). More extreme suicidal thoughts are reflected by a higher overall score. Whereas low total scores depict mild suicidal ideation.

1.11.3. Cognitive Appraisal. It is the process in which there is interaction between a person and the environment. It includes the perceived stress, associated threat, and availability of personal resources to cope with the stress (Lazarus & Folkman, 1984). High scores on the challenge cognitive appraisal style items shows the person appraises positive in the stress. Whereas high score on threat cognitive appraisal style items shows that the person appraises negative in the stressful situations.

#### **CHAPTER 2**

#### 2. LITERATURE REVIEW

Work is necessary for an individual through whom a person primarily fulfills his survival needs while subsequently achieves several psychosocial gains. These include establishing social relationships, achieving goals, self-actualization, creating a sense of importance, and forming an identity. Contrarily, people who are unemployed fail to achieve the necessary psychosocial gains, which leads them to feel inadequate, isolated, and have difficulty establishing relationships with others (Arnout, 2008).

#### 2.1 Unemployment Stress

The severity of unemployment isn't just the continuous increase in that state of mind of the unemployed individual but after some time it become worst. The threat lies in a healthy society that encourages the development of aggression, injustice, and extremism. Unemployment likewise implies an absence of pay, with an ensuing decrease in expectations for everyday comforts, an expansion in the number of individuals living beneath the destitution line and the related heartless circumstances. There are many destroying impacts of unemployment in Austria (Christl et al., 2016). Many nations are looking for and pointing to a review and investigation of the situations and outcomes of unemployment which has created and exceeded this attention. Both nations locally and globally focused on unemployment issue and to overcome the effects of unemployment on the people, society, and the nation. Unemployment is essentially connected with the critical parts of the social development of society and the state, whether security, social, monetary, and wellbeing (Jahoda et al., 1933).

Oswald (1997) has considered unemployment to be principal reason of despondency. Unemployed person become hopeless Unemployment is one of the fundamental indicators of individual stress. Due to unemployment an individual continuously under stress. Mental stress is one of the signs of our age, and the most of the people are suffering from widely recognized expression in our regular language. Adults are especially remarkable in distressing circumstances, particularly the unemployed. Unemployment is possibly the most significant problem and experiences that produce incredible toughness among youth. It may produce sense of precision and accuracy, which may build their mental stress, can prompt loss of personality for themselves. It may cause a feeling of passiveness, which may prompt dysfunctional behavior if a person unable to control such difficult experiences about unemployment which he faded away or feel stress. The consequences of a few studies have demonstrated the relationship of stress to psychological instabilities which revealed that individual in stress has no sense of decision making and dealing with daily tasks (Hammen, 2005; Kendler et al., 1999; Khan & Khan, 2017; Stroud et al., 2008; Yang et al., 2015).

According to the American Psychological Association (APA) mental stress is "many of the severe mental and actual side effects that are associated with common variations in mind-set in the huge majority of people" (VandenBos, 2007). Many examinations have announced the adverse consequences of unemployment on mental and actual prosperity. In a 1985 study, Linn et al. looked at how forced unemployment affected the mental and physical health of 30 middle-aged men. They lost their jobs during a significant research, which had negative impacts on their physical health. The unemployed males reported taking more days off and going to the doctor, and they experienced greater somatization, unhappiness, and

anxiousness as a result of the experience than those who continued to work (Linn et al., 1985).

There are many adverse consequences of unemployment. Studies have shown that stress breaks down one's confidence (Guindon & Smith, 2002; Ranzijn et al., 2006), increases melancholy and nervousness (Gallo et al., 2005; Guindon & Smith, 2002). A researcher reported decreased happiness in life, a limited range of opportunity, negative assessment style effects on family relationships, and increased concerns about what future holds due to unemployment (McDaniel, 2003). Adaptive resources refer to the personal, social, and financial resources that an individual can use to reduce the adverse effects of unemployment stress. Individual resources relate to internal development, which ranges from consciousness and stability in personality and locus of control (Mckee, 2005).

Increased unemployment is caused not just by a lack of opportunities and resources, but also by cruelty, injustice, and extremism inside the country. The expectations for everyday comforts of individuals diminished because of unemployment and individuals living in destitution. Because of unemployment individuals have unfortunate ways of life and dealing with monetary issues. There are many awful impacts of unemployment. One of them is stress. Many individuals experienced unemployment stress. It additionally analyzed by researchers that because of being unemployed people feel despondency in the life. In past researches, it is also analyzed that unemployment is related with chronic weakness and have hazard of dejection and tension (Oswald, 1997).

High productivity is essential to monetary stability. High and long-term unemployment may put a major strain on a country in three important areas (Krugman, 2021).

- **2.1.1 Individuals.** The unemployed often suffer from mental stress, illness, and even homelessness due to their inability to fulfill financial obligations.
- **2.1.2. Economic efficiency.** During the period of unemployment, there is lack of human resources in an economy's labour market and occurs when a large number of job searchers accept new positions that are below their skill level. Additionally, since consumer spending is a key factor in economic growth, unemployed employees will significantly lower their purchasing. In the absence of rising consumer expenditure, the economy will suffer a major recession.
- **2.1.3. Socio-political stability.** It is possible for citizen dissatisfaction to reach the point of widespread civil unrest if unemployment remains high.

Stress is a term frequently utilized equivalently with negative valuable encounters, or life altering situations. The continuous stress causes health problem and effects emotional well being of an individual. The person had to face different mental challenges. An individual who adapts stress can survive. Stress causes alterations in one's mental and emotional patterns. The term "stress" refers to processes such as evaluation, assessment, and response to harmful, damaging, or challenging situations or events. Distressing experiences can be physically or psychologically exhausting, triggering stress reactions and adaptive processes to bring stability. Instances of profound stressors incorporate unemployment, relational struggle, loss of relationship, demise of a nearby relative, and loss of a kid and so on. Normal physiological stressors are appetite or food hardship, lack of sleep or a sleeping disorder; outrageous hyper-or hypothermia, and medication withdrawal states (Garnefski et al., 2001).

Stress has been frequently associated with negative consequences and unhappiness. There are many external and internal factors which increases stress. Some stressors are short in duration which diminishes as the stressor disappears. It causes many behavioral changes and produces a sense of dominance and achievement, and can be seen as charming and stimulating. In any case, the more prolonged, repeated, or consistent the stress, more the individual would be in trouble and disturbed. For example as long a person perceives a situation stressful, it would be more worst and stressful with time. It also diminishes the sense of dominance or flexibility. When a person's external or internal demands exceed their external and internal resources, they are under stress. A singular encounters stress when outer or interior requests surpass their outside and inward assets (Lazarus & Folkman, 1984)

It is further helpful to recognize unemployment from being out of the workforce. An individual being unemployed has no work and is willing and ready to take some work whenever advertised. Individuals who have a constant time of studies and individuals who are doing exhibition programmes were not viewed as unemployed. To be considered unemployed, an individual should be effectively searching for work. Those without paid work who are not effectively searching a task are viewed as out of the workforce, or "idle." Some researchers refer these individual who are searching job as unemployed and the people who are not dominant and not working are refer as "non-utilized" (Shah, 2008).

When someone loses his/her job or does not have a job, not only their financial situation affects their lives, but also their personal work relationships, daily routine, and purpose for their life effects. Unemployment can and often is a challenge to the entire framework. Unemployment has the same intensity and pain as being seriously injured, going through a divorce, or mourning the death of a friend or family member (Blakely, 2003).

Every individual in his/ her life must go through any misfortune. Unemployment in young adulthood might bring drastic changes in mind set. Young unemployed person may perceive his/ her unemployment shameful because he/ she see his / herself as a responsible member of the family. For example, when an individual is unemployed as a young adult, their perception of control can be severely damaged since they may not have developed the cognitive flexibility to maintain perceived control (Heckhausen et al., 2010).

There have been various ways of perceiving stress, e.g., as a physiological reaction an individual feel stress and try to fight or fly from the stressful situation. In this a person can adapt the stress and make strategies to overcome that problem (Cannon, 1914). Past investigations showed that unemployed individuals experience more pain than those who are employed, as investigated by different mental prosperity markers including perceived negative aspects of any stressful event, sorrow, tension, psycho-physiological effects, emotional prosperity, confidence, and life fulfillment (Paul and Moser, 2009). In light of the European Social Survey (ESS), researcher showed the pessimistic relationship among unemployment and abstract prosperity, which comprised of measures like stress, satisfaction, life fulfillment, and individual bliss (Meer, 2014). Reneflot and Evensen (2014) examined the destructive effects of unemployment in young adults and discovered that unemployment elevated the likelihood of stress and afterwards affects their psychological wellbeing.

The fundamental requests assets sales development representative (SDR) model (Becker et al., 2004) of wellbeing figures out wellbeing because of perplexing and dynamic variation and guideline processes between an individual and their current circumstance. The particular value of the SDR model is the conceptualization of both intrinsic and outside requests and assets that can likewise add to a separated comprehension of the experience of

stress. Outside requests have their starting point in the people's current circumstance, for example, assumptions or cases that are made by soul mates or imperatives brought about by the work circumstance of the person. Inside requests result from assumptions, convictions, and virtues of a person that worry themselves and their current circumstance. Outer assets are given by the climate like social help, training, and monetary capital. Inside assets include intrapsychic qualities like confidence and the healthy identity adequacy (Becker et al., 2004).

The conservation of resources (COR) is a hypothetical framework for understanding how individual assets moderate mental health impacts related to unemployment. Hobfoll (1989) explains that people will have problems when they feel threatened by a lack of what they value (an asset) or when they really suffer a tragedy. A reduction in one's ability to manage problems, which therefore results in a fall in one's prosperity, may be interpreted as the anticipated or seen loss of assets, such as unemployment. According to the COR hypothesis, there are four categories of assets: energy (e.g., time, cash, information), conditions (secure future), mental abilities (such as confidence and feeling of authority), and things (such as food, housing, and transportation). In this unique context, having some work is viewed as a contingent asset that assists people with acquiring different sorts of assets like items and energies (i.e., food, sanctuary, cash) and individual assets (e.g., dominance). At the point when "conditions" and "energy" are deficient, people can't manage natural dangers, and experience hindrances in their prosperity (Hobfoll, 1993). Besides, people who have not many assets are more vulnerable against the deficiency of assets, while those with more noteworthy assets can acquire extra assets (Hobfoll, 1993). Subsequently, those with low degrees of assets of several types are expected to encounter more prominent threat directly following unemployment contrasted with people with more noteworthy assets.

In stress research, there is an expansive writing on the stress buffering impacts of social help during unemployment (Milner et al., 2016). In Previous examination, it is analyzed that unemployment would expand life strain and this thusly would diminish once trust, positive thinking, and feeling of dominance toward his/her life. Tragically it additionally expands the darker aspects of monetary strain and dejection (Achdut & Refaeli, 2020).

The number of unemployed and underemployed college graduates has steadily increased. As more new graduates enter the labour force and government administrations and the private sector are unable to provide sufficient marketing services (Cassidy & Wright, 2008) The rising unemployment or underemployment is probably going to force unfavorable cultural and individual results that might be challenging to address. Certainly, the recent researches have shown that the situational factors driving unemployment (UE) are very different, and had all the earmarks of being related with the menace of showing normal emotional health failures, like sorrow, nervousness, and stress (Artazcoz et al., 2015).

As per Selye (1979) numerous people show indications of psychological breakdown because of experiencing sudden stressor, i.e. unemployment which in turn produces mental side effects such as discouragement, exorbitant anxiety, withdrawal, self preoccupation, distance, and issues of fixation, etc. According to Selye, psychological stress is a reflex response or a nonspecific reaction to the demands of the environment that trigger the individual as an alarm.

It has been socially observed that these successive psychological and emotional failures directly or indirectly lead to suicidal ideation, suicidal attempts or, in extreme cases,

to suicidal commitment. Some recent studies on suicide (Milner et al., 2019) have suggested that unemployment is one of the major stressful life events that breaks down the psychosocial and emotional strength of an individual bringing him closer to self-defeating ideations and behaviors (i.e., dysfunctional behavior and family ties and lost self-confidence etc.); succession to these may lead to the risk of suicidal ideation or attempt or suicidal commitment.

Previous research focused on the psychological impacts of unemployment and the behavioral alterations related with loss of sense of control. A control group of participants was also assessed along with the subjects who had been unemployed for a longer period of time. The results showed that unemployed participants had a stress reaction as shown by elevated urine catecholamine levels and behavioural performance issues. Additional evidence has been provided that examines participants' attributions and behaviors in relation to the concepts of reactance. The findings support a biphasic reaction to loss of control. (Baum et al., 1986)

#### 2.2 Suicidal Ideation

Assessing suicidal ideation is a crucial part in determining the risk of suicide for those who do not have stable psychological conditions, especially in adult populations across the world. Suicide ideation increases a person's lifetime likelihood of engaging in suicidal behaviour compared to those who have never had any suicidal thoughts. However, the risk is minimum. It is also not confirmed that from suicidal ideation an individual's impending suicide risk determined. It is not a general assessment tool to measure suicidal behavior (Bernert, 2014).

Suicidal ideation is a difficult issue for the individual worried as well as the connected families and the country. There is a common popular misconception that those who are determined to be on stress are in danger of ending their life or falling into suicidality. However, nearly 40% of people who commit total suicidal attempt are not clinically depressed; this implies that other mental situations may also increase the risk of suicidal ideation and suicidality (Shah, 2008). Since suicidal ideation often precedes suicide, both research and treatment take all features of suicidal ideation into account (Tarrier et al., 2013). Kerkhof and Spijker (2011) claimed that the process of suicidal ideation is more likely as stress and depression. In addition to more general conceptual views, an individual have both positive and negative cognition in stress. But negative thinking is common in stress which may be held about suicidal ideation (Bradvik & Berglund, 2011). As per hypothesis of the previous studies of suicidal ideation, negative attributional styles increase risk negative perception of an individual which leads to suicidal ideation and also suicidal attempts (Abramson et al., 1998). Previous research has found that the absence of optimistic future expectations is a better predictor of subsequent suicidal ideation than melancholy (O'Connor et al., 2008)

Suicidal thoughts and suicidal attempts are more prevalent in late adolescence (Strandheim et al., 2014). Past studies demonstrated that suicidal thoughts was caused by a number of factors, including family and social factors. There elements may include stress that outcome from variables like parental separation, unemployment and environmental factors and other adverse life events (Evan et al., 2004). The socioeconomic status (SES) was viewed as related with suicidal ideation (Kwok & Shek, 2008). Past studies also shows that low financial standing, such as low pay, may result in undesirable family conflicts and lack

of bounding. This phenomena also produces suicidal ideation and destroys the family. Suicidal ideation also brings destruction in individual's psychological wellbeing (Evans et al., 2004). Suicidal ideation is formally defined as having the desire to die by suicide and making plans to do so (Purse, 2011). Most of the individuals with suicidal ideation do not have suicidal behavior or intention to commit suicide (Gliatto & Rai, 1999). Some researchers have inferred three significant aspects of suicidal ideation; active suicidal desire, some plans for suicide and passive suicidal desire (Beck et al., 1979). According to research, the emergence of suicide attempts depends on repeated exposure to a number of social, familial, personality, and mental health aspects (Fergusson et al., 2000).

Various models of suicide risk have been suggested that suicide is the consequence of an association between natural determinants and individual character qualities (Johnson et al., 1999; Gupta & Gupta, 1998). Suicidal ideation and ways of committing suicide always have some reason. There may be some stressors or problems that cause psychological distress (Sivak et al., 1999), poor self-esteem and higher levels of despair (Van & Vincke, 2000). Another investigation discovers that monetary difficulties, legitimate stress, family hardships, stress discernment, gloom, tension, agony and low material help, low confidence and outside locus of control are essentially connected with contemplations of suicidal ideation (Vilhjalmsson et al., 1998). The research demonstrates that depression and low confidence in the family setting are strongly linked with suicide ideation and attempts, but low family confidence completely separates suicide attempters from ideators (Wild et al., 2004).

Previous studies revealed that unemployment is one of many variables that add to suicide ideation and suicide risk (Agerbo et al., 2002; Blakely et al., 2003; Mortensen et al., 2000; Robert et al., 1995). Long ago, it was believed that unemployment caused social

disengagement, which increased the likelihood of suicide (Durkheim, 1968). Individual tried to avoid the relationship with the event from developing mental disorders. In past researches, it was experimentally focused that there is a connection between suicide and unemployment. People who suffer from some negative situations like unemployment are more likely prone to stress. Regardless, several studies have suggested that no significant relationship exists between the two factors (Appleby & Dennehy, 1999; Powell et al., 2000). However, while there were variations in the rates of suicide ideation, most countries have consistent rates of suicide attempts. From 2.09 (Beirut) to 18.51(New Zealand) is the overall prevalence rates for suicidal ideation were found. This variation is only related to the increase in mental issues, division or partition among countries, and is most likely due to social factors that are still unknown (Weissman, 1999).

Suicidal ideation can be assessed in the United States by dialling "the public suicide counteraction life saver" - a cross-country complementary hotline that serves as an alert to state agencies. There were 13,423 inquiries to as the decline began in January 2007. There were 39,467 after a year. The average increased in August 2009 at 57,625. In 2009, the United States government provided the organization an additional \$1 million to expand programmes in areas with high unemployment rates. (Lowrey, 2010). Overall more than 800000 passings each year have been counted by suicide (WHO, 2002). According to a review of findings for the US preventive help team, around 500,000 persons required stress therapy in US clinical centres after attempting suicide (Gaynes et al., 2004).

Looking at the current state of Pakistan, where the country's population is growing, terrorism is on the rise, the unemployment rate is rising, and 60% of Pakistanis live in poverty (Khan & Hyder, 2006). All of it enhances a sense of helplessness that contributes to

depression, suicidal ideation, and attempts among the general public. According to studies, Pakistan has no official statistics on suicide (Khana et al., 2008). In Pakistan people who tried to commit suicide in life, avoid going to the government hospitals because of the fear of stigma and police persecution. Newspapers, reports from NGOs, voluntary groups, human rights organizations, and police agencies from various cities are among the sources of information on suicide in Pakistan (Khan, 1998). Further data was collected from the research conducted in hospitals information is available from hospital based studies. For instance, research has been done on acute intentional poisoning (Shah et al., 2006), deliberate self-harm (Shahida & Hyderb, 2008), and autopsies performed by Forensic Medicine Departments (Bashir et al., 2003).

Previous research indicates that young adults have more suicidal ideation and commit suicide because they have trouble coming up with strategies to solve difficulties (Dixon et al., 1994; Schotte & Clum, 1982, 1987). The inability to solve problems is regarded to be a sign of cognitive rigidity (Schotte & Clum 1982). Rumination and other maladaptive thoughts are associated with cognitive rigidity (Davis & Nolen-Hoeksema, 2000). It has previously been demonstrated to predict increases in suicidal ideation among individuals with a history of suicide attempts throughout a 6 month follow up (Miranda et al., 2012). Suicidal thoughts and attempts are associated to cognitive inflexibility, which is characterised as the incapacity to alter decision-making in response to environmental feedback. (Lezak et al., 2012), however there is conflicting evidence to support this relationship (Jollant et al., 2011).

Reports indicate that almost 80 people attempted suicide in year 2009, two persons per 100,000 suicide rates reported in 2008, which is significantly less than the global frequency of 14 per 100,000 individuals (WHO, 2010). Epidemiological study conducted

from 1995 to 2004 on suicide in six cities of Pakistan indicates that crude rates per year per lac are: 0.43 in Peshawar, 2.86 in Rawalpindi, 2.1 in Karachi, 1.08 in Lahore, 1.12 in Faisalabad and 2.6 in Larkana (Khan et al., 2008). Previous studies show that young adults and women are more likely than men to attempt suicide (Crosby et al., 1999; Mann et al., 2005; Walrath et al., 2001). However, in Pakistan rate is high among male (i.e., 5.2/100,000) and low among female (i.e., 1.7/100,000). Vulnerable age has been noted 20-40 years (i.e. 7.03/100,000) (Khan et al., 2008). An Indian survey discovered that, respectively, 24.6% and 7.1% of adults had suicidal thoughts and attempted suicide (Kar, 2015) Among married adults, the prevalence of suicidal thought, suicidal behavior, and suicidality was 5.8%, 3.4%, and 8.3%, respectively (WHO, 2020).

Different measures to minimize the incidence of suicide among young adults management of crisis, boost self-esteem, development of healthy decision include making and social Moreover, suicidal ideation prevention and mental health skills. programs are needed to be collaborated within the primary health care system (World Health Report, 2000). The fact that suicide thoughts, intentions, actions, or attempts did not significantly reduce in the United States despite a dramatic increase in treatment during 1990 to 2003 (Kessler, 2005). However, to reduce risk factors the proper psychiatric intervention has been found effective in reducing suicidal ideation, regardless of depression severity (Martha et al., 2004). James and Koppel (2004) also have concluded that the effective intervention reduces the suicidal ideation and depression. As shown in the neighboring country of Sri Lanka, crisis intervention centers and telephone hotlines for suicide prevention are crucial for assisting those who have suicidal ideation and commit suicide (Ratnayeke, 1996). Such services must be introduced in Pakistan.

Suicidal ideation, depression and suicide attempts have been significantly found associated with un-employment / economic burden (Johnson, 1999), panic disorders (Gupta & Gupta, 1998) and differences in body mass index (BMI), both among women (i.e. increased BMI) and men, (i.e. lower BMI) (American Journal of Public Health, 2000). Along with unemployment, many factors have been studied in association to the issue, such as; dissatisfaction with employment (Robert, et al., 1995), being single, history of suicide attempts, family history of suicide, substance abuse, divorce, serious medical illness (APA, 2003; Crosby et al., 1999; Mann et al., 2005; Walrath et al., 2001), mental disorders, history of psychopathology (Beautrais, 1999), stress, shame, avoiding pain and undesirable fate (Gliatto, 1999). Even victimization of bullying among the adolescents were also related with a higher risk of depression and suicidal attempt (Kaltiala, 1999). Studies have also indicated that stress factors may trigger a suicidal act only among those who are vulnerable with reference to their personality (Mann et al., 1999; Platt & Hawton, 2000). Pharmacological studies show that "S" allele gene plays a role in the history of violent suicide. Suicidal behaviour and the "S" allele have been associated to neuroticism, affective temperaments, and impulsive hostility (Gonda et al., 2011) and also suicidal behaviour runs in families. Another research reveals that the suicidal attempts and completions are included in the transmitted spectrum of behavior, but not ideation (Brent, 1996).

Physical, psychological and economic burden of suicide on families and larger societies could be enormous. Its prevalence rate could be a key indicator of communities' health (Norheim et al., 2013). When examining the various triggers and mechanisms that could result in suicide, suicidal attitudes and thoughts are crucial predisposing factors (Corson et al., 2013). Based on the notion that attitudes about suicide and suicidal thoughts

have a consistent pattern throughout nations, cross-culturally validated questionnaires may be used to research attitudes toward suicide in diverse countries. Only the form of suicide, the severity of suicide attempts, and the scope of such attempts may differ based on the cultural setting (Mofidi et al., 2008).

It is clear that suicidal thoughts develop in a "waning and waxing manner", hence, they differ widely in terms of intensity and traits. The complexity of the phenomena of suicidal ideation must be understood by healthcare professionals. Its intensity and duration vary individual to individual. As there is no suicidal ideation or thought then there would be no suicidal attempt. Unfortunately, suicidal ideation is typically recorded in healthcare records using a simple yes/no format., despite the fact that it includes everything from brief thoughts to kill one self and never waking up to highly disturbing obsessions, may be due to delusions. So to predict suicidal attempt, all healthcare professionals must carefully assess and keep track of the pattern, severity, frequency, and effects of suicidal ideation on the person and document this accordingly. Suicidal thoughts should also be regularly evaluated due to its fluctuating pattern (Bernert et al., 2014)

The degree of suicidal ideation fluctuations was examined using an observational assessment technique. The severity of suicidal thoughts might be monitored hour by hour for four weeks by persons selected as a sample who commit suicide in the previous year and people who attempted suicide in real life. The analysis of these data revealed that all respondents' degrees of suicidal ideation varied significantly. Suicidal ideation was found in all participants, and its severity varied by one standard deviation on the majority of days. On the same day, many people experienced one standard deviation deviations that occurred many hours apart. This information is essential for all healthcare professionals to understand

because it emphasizes the value of observing changes and not disregarding the probability of unexpected increase in suicidal thoughts, even if the level is currently low and the person manage that at the moment. Suicidal thoughts is also seen to be a more accurate indicator of a person's lifetime risk for suicide than immediate risk because suicidal ideators have continuous planning in their mind to kill one self. Therefore examination should include explaining the characteristics and consequences of both earlier and current suicidal ideation. (Obegi, 2019)

There are more issues besides the unclear nomenclature. A comprehensive review of the several professional clinical suicide recommendations found that there is no consensus on a clinical gold standard for diagnosing and treating patients with suicidal ideation or those who are at risk of suicide,. However, there are tools for evaluating depression, suicidal thoughts, and suicide risk. None of them yield a score that is clinically relevant or sufficiently accurate for identifying the very specific proportion of suicidal ideators whose death by suicide is probable (APA, 2016).

Researchers found that, globally, unemployment is related with a 20%–30% increase in the relative risk of suicide. There were an estimated 233,000 suicides each year between 2000 and 2011, of which 45,000 were probably caused by unemployment. Before the accident, in 2007, there were 41,148 suicide instances that could be verified. This number increased by 4,983 or 12% in 2009 to 46,131 (Cummins, 2015)

Suicidal ideators are those who are considering taking their own lives but have not yet made an overt attempt. In order to assess present suicidal intention and maybe forecast future suicidal risk, it is necessary to concentrate on the intensity, pervasiveness, and aspects of the thought and desires. This is because suicidal ideation may precede a suicide attempt or complete suicide (Beck et al., 1972).

Suicidality is characterized by the obsessions that life is not valuable. Suicidal ideation is another name for it. It can take many different forms, from transient ideas to deliberate plans to harm or kill oneself. It is classified as either having a personality disorder or having the traits of emotional blackmail. It is one of the aspects of suicidal behavior, along with suicidal ideation, planning, and attempts that result in suicide. It is a helpful tool for detecting those who have suicidal risk (Stack, 1984).

The prevention of suicidal ideation is still a big challenge as many people are committing because of certain stressors. In fact, there had been a significant drop in suicide rates in Western countries, but it didn't seem to be related to any national policy intended to make a difference in situations which are associated with suicidal behavior. The recent decline in suicide rates in many nations is most likely due to overall improvements in living conditions, better access to healthcare, and more effective treatments for mental problems. The most recent financial and economic crises, as well as the persistent threat of an endless war, will, nevertheless, have an immediate impact on living standards and unpredictable outcomes (De, 2002).

In past studies, there were significant variations in suicide mortality can be caused by socioeconomic factors (Blakely et al., 2003). Particularly, unemployment appears to be connected to both direct and indirect pathways of suicide risk. Previous studies have demonstrated a relationship between unemployment and suicide (Blakely et al., 2003). Their findings show that this correlation is only partially connected to health selection or mental

disorders and that it cannot be attributed to confounding factors associated with socioeconomic level. The authors may determine from statistical analysis that roughly half of deaths are caused by mental illnesses. However, this alone does not overcome the impact of unemployment. Depression symptoms precede unemployment. Furthermore, the inability to use social and health resources adequately as a result of unemployment may threaten adherence with properly recommended interventions which might lead to a mental condition's course making worse (Proudfoot, 1997).

The Center for Behavioral Health Statistics Quality established the National Survey of Drug Use and Health known as American national household survey (NSDUH). According to Piscopo's 2017 paper, which aggregated the results from the surveys conducted from 2009 to 2014, 6% of respondents aged 18 to 25 gave the survey question a favourable response. For example, a question asked in the survey, "At any moment in the past year, did you seriously think about to kill yourself?" In contrast, the risk of suicidal ideation was lowest among people 65 years of age and older i.e. 1.6%. Endorsing suicidal ideation and committing suicide do not have clear association. Only one American out of the 31 who have suicidal thoughts actually makes an attempt each year. In addition, suicide death rates differ based on factors such as gender, age, race, and other demographics. Comparing the NSDUH results to CDC death records, also revealed a limited correlation between reported suicidal ideation and fatal suicides. White males over 75 have the greatest risk of suicide mortality while having the lowest prevalence of suicidal ideation (approx. 40 per 100,000). Females over 75 years of age, however, had significantly lower rates (4 per 100,000). Significantly fewer suicide fatalities occurred among the 18 to 25-year-old group of suicidal ideators (4 per 100,000 for females and approx. 17.5 per 100,000 for males) (Berman & Silverman, 2017).

Even when reporting suicidal ideation, most persons could control their suicidal thoughts and do not commit suicide. Psychiatric Association Practice Guidelines (2016) found that suicidal ideation in adults is a symptom of primary psychological disorders, and 90% of suicide attempts are consistent with the diagnostic criteria for one or more mental illnesses. Although statistics clearly reveal that a wide range of mental disorders are linked with high risk of suicide. Suicidal mortality affects all racial and ethnic groups as well as almost all psychiatric and physiological conditions. According to the statistics of CDC's mortality of 2017, more than 49% of those who die by suicidal attempt had an undiagnosed mental disorder. Some researchers have argued that suicidality should be treated as a separate mental illness, complete with symptoms and underlying pathological processes (Goodfellow et al., 2018). Although this is outside the focus of this study, it is a growingly common argument. After analysing all of the clinical guidelines currently in use, the author came to the conclusion that it is important to critically evaluated easily approachable good practise guidelines which being adaptable to multiple disciplines of medicine and clinical practices, that may be the first point of contact for risk detection, intervention, and prevention of suicidal ideation and behavior (Bernert et al., 2014).

Previous research have mostly focused on it, despite the fact that suicidal ideation is a severe issue, . Since suicide was not the intended topic of this article, it is hard to emphasise the significance of suicidal ideation without at least briefly mentioning suicidal activities and results. In 2017, The Centers for Disease Control and Prevention (CDC) anticipated that there were around 10 million Americans who had suicidal ideation. Fortunately, the majority

of people who have suicidal ideation in America and across the world never really attempt suicide, and even fewer use violent methods that cause death. Ten million Americans reported suicidal ideation in 2017, and there were 1.4 million suicide attempts among them. However, only around one-third of those who tried suicide sought treatment. The severity of methods used during attempts to commit suicide and the desire to do so varies substantially. In America (2017), half of the 47,000 suicides were attempted with the use of guns. (CDC). (Glenn, 2018)

Past studies also consider various factors, such as life stressors, stress perceptions, lack of social support, disruptive personality, usage of drugs, threatening situations, distress symptoms, and low socioeconomic status, may contribute to adult suicidal ideation (Park et al., 2021). According to research conducted in the Icelandic city of Reykjavik, financial difficulty, legal stress, familial troubles, perception of stressful events and limited resources are all strongly associated with suicidal ideation (Hugunin et al., 2021)

The World Health Organization (WHO) gathers mortality data for all member countries, including the prevalence and method of suicide. After declaring that there was a "global public health crisis" caused by growing suicide rates, they began promoting evidence-based suicide prevention techniques globally in 2013. In underdeveloped countries, where poison intake was the major cause of suicide attempts, suicide prevention campaigns urged the use of less harmful poisons. There is evidence that preventing the use of lethal methods can lower suicide rates, but this needs a comprehensive systemic strategy that involves cooperation between law enforcement and healthcare professionals as well as steps to mitigate other risk factors (Goodfellow et al., 2018).

**2.2.1 Active and Passive Suicidal Ideation.** Active suicide ideation is defined as having current, definite suicidal thoughts. When a person has a deliberate wish to hurt himself and has a desire for death, this results when active suicidal ideation is present. The likelihood of their behavior's severity, as determined by the method adopted in the suicide attempt, is not the main emphasis. The crucial element is the person's belief that their attempt would end miserably. An example of an assessment item for active suicidal ideation from the "Modified Suicidal Ideation Scale" by Miller et al. (1991) is "Did you wish to kill yourself over the past day or two, when you had suicidal thoughts? How often? a little bit? quite frequently? A lot? Do you intend to end your life right now?" Whereas passive suicidal ideation is defined as a broad desire to die but without any intention of committing serious self-harm in order to kill oneself. Indifference to an unexpected death that would occur if actions to maintain one's own life are not taken indicates passive suicidal ideation. Clinicians and researchers pay less attention to passive suicidal ideation than to active suicidal ideation. Few studies distinguish between active and passive suicidal ideation, despite the fact that the majority of research papers do not. According to one author, healthcare practitioners often assume that the desire to die does not typically indicate more serious suicidal consequences. "Have you ever wished you were dead in the past month?" is an example of a passive suicidal ideation assessment question from the European Depression Scale (Aneshensel, 2009).

# 2.3 Cognitive Appraisal

Cognitive appraisal is the examination of an emotional situation in which a person assesses how the event will impact them, analyses the several components of the event, and then formulates a reaction based on that interpretation. When there is no physical stimulation nor clear cues as to how the scenario should be evaluated, cognitive appraisals often take

place. For instance, you won't require a cognitive appraisal if you wake up in the middle of the night to find a stranger standing over you with a pistol since the threat to your safety is obvious and there is no need to evaluate the circumstances (Lazarus, 2000).

Lazarus and Folkman (1984) also defined cognitive appraisal as "the cognitive process of determining how stressful the relationship between persons and their surroundings is," including the following components: (1) the amount of threat connected with the stressor (threat appraisal), (2) the potential harm of the threat (hazard appraisal), (3) how actively the individual wants to face the threat (challenge appraisal), and (4) the degree to which the situation can be managed (controllability) (Ohta et al., 1994). Stress can be caused by exposure to environmental demands and stresses, but there can be individual and group differences in the way and degree of response to such stressors, as well as sensitivity and vulnerability to such events. Individual differences in the responses people show in certain stress situations were also found to have a considerable influence on individuals' cognitive processes (i.e., cognitive assessments for interpreting stressors) (Lazarus & Folkman, 1984).

Previously cognitive theory suggested that, our emotions, bodily responses, and behaviours are the result of our thinking in the present time. Automatic thoughts are the unplanned, spontaneous interpretations linked with certain happenings in the present. Beck refers to dysfunctional automatic thoughts occurs when the automatic thoughts have different understandings with present circumstances (Beck, 1979). If an individual gets the dysfunctional automatic thought, "I'm a loser," in a specific situation, this interpretation is most likely due to the activation of the maladaptive core belief, "I'm incompetent." Sadness, anxiety, heightened autonomic system activity, and a desire to avoid people are all possible outcomes of the dysfunctional automatic thought, "I'm a loser." Cognitive theory also argues

that our emotions, bodily responses, and behaviour all have an impact on our thoughts and ideas (Beck, 1979). Cognitive appraisal describes the changes in individual perception of unemployment. According to McKee-Ryan and Kinicki (2004) "the personal meaning of unemployment to the individual displaced worker plays a critical role in coping behavior".

Previous research has identified emotional regulation choice variables. Several considerations should be raised. Differences in how people cognitively perceive a situation or a stimulus in the first place have been ignored. One of the fundamental dimensions of variation among emotional situations is emotional intensity (Sheppes et al., 2011). However, Even if persons confront a situation with similar intensity of emotion, their cognitive appraisal of the situation will be significantly different. Previous research has focused on the antecedent circumstance or stimulus's "cognitive assessment" as a predictor of cognitive emotion regulation choice. Cognitive evaluation is defined as "the act of evaluating an experience and its numerous aspects in terms of its importance for well-being" (Lazarus & Folkman, 1984).

As Lazarus and Folkman (1984) pointed out, the choice of coping method is determined by how we assess the situation. Given that both emotion regulation and coping can be defined as subordinate to the broader construct of "affect regulation" (Gross, 2014), Cognitive emotion regulation and "cognitive coping" can be used synonymously (Garnefski et al., 2001), cognitive appraisal is thought to predict cognitive emotion regulation choice.

The way a person analyses a situation and his or her specific coping mechanisms impact how they perceive stress and strain, making cognitive appraisal processes essential for understanding human adaptability to stressful conditions. Therefore, two cognitive

processes—primary cognitive appraisal, which involves evaluating the situation's personal significance, and secondary cognitive appraisal, which involves evaluating the individual's capacity to cope with stressors—become essential for comprehending a person's behavior and emotional states during a stressful event (Lazarus, 1991). There is evidence that individual differences in primary cognitive appraisal (e.g., threat and challenge appraisals) exist. Threat perception, for example, is associated with undesirable outcomes such as low coping expectations and anxiety (Lazarus & Folkman, 1984; Sarason & Sarason, 1990; Skinner & Brewer, 1999). Although challenge appraisals are associated with positive outcomes such as happiness as a result of the efficacy associated with conquering problems and excitement in expectation of personal benefits (Lazarus & Folkman, 1984).

2.3.1 Scherer's component process model. The component process model was suggests by Klaus Scherer. It use cognitive appraisal to describe a person's emotional and physiological reactions to circumstances. Regarding how many appraisals take place, Scherer's approach adds to Lazarus' transactional model. He suggested that there are four unique appraisals that take place in reaction to an event rather than simply two (primary and secondary). The first one is the immediate effects of an event or its relevance that an individual perceives. The second is how an event will affect a person and their goals in the short- and long-term. The third factor is a person's perception of their capacity to deal with the consequences of an event. Fourth is the ways that a person interprets events depend on their beliefs and self-concept. This model and other studies by Scherer emphasize not just psychological reactions but also several physiological responses depending on how an individual perceives situations (Scherer & Klaus, 2009)

### 2.4 Related Researches

Unemployment is typically characterized by a series of stressful events, ranging from the anticipation of a lack of jobs and resources to job search and system disappointment. Other than the normal life patterns and activities, lack of resources add stress in person's life. Increased the likelihood of suicidal ideation and depression which leads to suicide (Proudfoot et al., 1997). Individuals with higher socioeconomic class are likely to be better protected from unemployment-related reductions in control. Since higher socioeconomic status is generally associated with access to material resources (e.g., savings) to compensate for income loss (Mckee et al., 2005).

An ecological study on suicide conducted in the United States from 1948 to 1978 discovered that longer periods of unemployment (measured as a continuous variable) were associated with higher male suicide ideations, which led to suicides (Stack & Haas, 1984). Another ecological study by Shah found no relationship between long term unemployment (time period undefined) and suicide rates across 27 countries. The outcome variable in this study was suicide rates in those aged 65 years and over, a population not widely represented in the labour market (Shah, 2008).

Blakely and colleagues (2003) found that the suicidal ideation and unemployment have association and mental illness plays an important role in it, which they primarily conclude from the analysis of the study. They further explain that mentally ill people would to a larger degree be non-active on the labour market rather than unemployed, which then suggest a sensitivity analysis for the group of those who are non-active on the labour market.

Global financial crisis has badly affected the economy for many years due to which an unemployment period extends across many European countries and threatening the future of people and well-being of young generation. Most serious consequences of this worldwide crisis has warned by WHO. It was not happen suddenly and there were foreseen stresses which lead to suicides and mental disorders (WHO, 2009).

In the past studies Grease reported high rates of suicidal risk due to increasing economic crisis between 2009 and 2011 primarily among people of the affected zone of financial strain i.e. lower amount of financial resources available to individuals and families (Economou et al., 2013). Young people are at high risk of suicide (Hawton et al; 2012). The most silent phenomena affecting health in times of economic crisis is unemployment (Granados, 2005). Recent investigations revealed and uncertain relationship between unemployment and suicide due to the recent economic crisis (Laanani et al., 2014). In past years in western countries and increase in mental health problems including suicide have been reported (Kosidou, 2012).

In previous studies it is also suggested that unemployment stress would be associated with an increased risk of suicidal ideation (Glenn et al; 2018). Some characteristics are also associated with unemployment stress i.e. low socioeconomic status, lack of social interaction (Kagamimori et al; 2004), alcohol abuse (Caan, 2009), major depression, (Caan, 2009), and history of depression in family (Brent & Mann, 2005) which increases the risk of suicidal ideation and leads to suicidal attempt.

In USA, literature showed that as compared to the lower socio economic status, higher could be at suicidal risk. Men and women are both at suicidal risk when they are

unemployed (Blakely et al., 2003). Research studies found that exposure to unemployment is related to suicidal ideation even when controlling other known psychosocial confounding factors and negative causality (Fergusson et al., 2003). Therefore unemployment should be considered a true factor for suicide.

Many researchers investigate that bad mental health and stress related to unemployment increase the risk of psychological disorder that implies an increased risk of suicidal ideation also lead to suicide. In a proposed study of 20 years on a large sample of psychiatric outpatients unemployment was the most apparent social factor that lead to suicide risk together with clinical symptom of suicidal ideation and major depressive and bipolar disorder (Brown et al., 2003).

Unemployment among young people has been stated as having serious problem for young adults' future lives and for society as a whole. Previous research has found that unemployed young people are more prone to suffer from stress and poor physical health (Brydsten et al., 2016). Criminal behaviour is more prevalent among unemployed persons (Fergusson et al., 2001). It elevated the probability of smoking (Barnes et al., 2009). Additionally, it increased the chances of drinking and abusing other drugs (Compton et al., 2014). Furthermore, greater suicide mortality rates among young individuals have been associated with unemployment (Christoffersen et al., 2003) and alcohol-related mortality (Eliason, 2014). Furthermore, unemployment among young adults may increases the risk of psychological problems such as low self esteem, depression, and loss of confidence (Kabaklarli & Hazel, 2014).

However, the experience of unemployment is not the same for every unemployed person, so where possible, intervention programs should be tailored to suit the individual. Participants with fewer personal resources, greater dissatisfaction with their unemployment status, and more financial hardship were more likely to report clinical symptoms than those who reported more positive self-evaluations and appraisals and who placed less value on employment. Thus, those variables represent psychological vulnerability factors, which, if identified early, could be targeted for intervention programs to decrease the likelihood of deterioration of an unemployed individual's mental health identified by Judge, Erez, Bono, and Thoresen (2002). Unemployment can negatively impact a person's sense of accomplishment regarding major developmental goals and could set in motion declines in perceived control that could increase one's likelihood of encountering health declines (Schmitz, 2011).

People form cognitive judgments, which are made up of primary and secondary appraisals, in all stressful situations. Different response behaviors may function better or worse for particular stressors, and coping strategies might change based on the environment in which stress occurs (Claude et al., 2020).

A previous study explored the making procedure of cognitive appraisal of unemployment occurred due to contextual factors, socio-demographics and beliefs. Cognitive appraisal dimensions (challenge, loss, threat, reversibility) of unemployment zone. A sample of 209 unemployed people aged over 45 years were measured in socio-demographic variables. The study results revealed that 13% of variance in laws and 17% variance in threat is observed due to the time duration of unemployment, coping self-efficacy and monthly income of family members. A variance of 25% challenge cognitive appraisal is seen

by general believes, age and relationship status and 9% variance in reversibility is shown by age and unemployment duration. Several studies have considered cognitive appraisal as a key factor in stress reactions. As during unemployment a person feels stress as he / she appraises his / her situation (Feather & Davenport, 1981;Gowan et al; 1999; Leana & Feldman, 1990).

Previous research shows that there are individual differences in cognitive appraisal styles (i.e. negative / positive) in stressful situations (i.e. unemployment, crises, loss of loved one). It is related to interpretation and assessment of the situation that how a person perceives the situation (Biggs et al., 2017). Based on cognitive theories, negative attitudes have incorrect assumptions and lead to negative cognitive processing in stressful situations (Law & Tucker, 2018).

As a measure of meaning and purpose, researchers have previously identified "collective purpose" as one of the hidden factors (Paul & Zechmann, 2018; Steger & Dik, 2009). This is consistent with Frankl's (2006) classification of employment as the primary agent of meaning in life. It is therefore feasible for people to sense a loss of purpose in their lives in addition to losing their jobs when considering the context of unemployment. This loss might be considered a source of stress (Park, 2010). According to earlier research using the Jahoda's deprivation model, people become stressed when their interpretation of an event is different from their overall meaning of life (Jahoda et al., 1933). Previous researchers suggested the concept of incongruence and negative assessment as a theory to explain the psychological pain that people go through while unemployed (Paul & Moser, 2006).

The concept of normalization is the basis of unemployment normalization. It means if a person perceives his/ her unemployment as normal situation then it would not be stressful

(Ashforth & Kreiner, 2002) and the person become adapted to the unemployment context (Pignault & Houssemand, 2017). Unemployment normalization is constructed of four dimensions. The emotional element of unemployment's normalization is explained by the first two. The negative impression of unemployment explains the negative experience of being unemployed, whereas the positive view of unemployment highlights the good characteristics or benefits of being unemployed. The other two discuss about how normalising unemployment has an impact on cognitive processes. A person's situation is typically explained as the outcome of circumstances over which they have no control, which is known as an external reason for unemployment. The last factor, unemployment norm, evaluates how society views unemployment as a natural life event. In a previous study, normalizing unemployment had two distinct effects on mental health (Pignault & Housemand, 2017). It can have very negative consequences, such as when someone blame and perceives the situation as unfavourable. It can also have a favourable effect on mental health, for as when someone sees being unemployed as normal or routine and so perceives its advantages (Thill et al., 2019). Frankl (2006) suggests that having a sense of purpose in life can improve one's experience of unemployment and, as a result, minimize the stress that individuals go through when they are unemployed (Frankl, 2006).

The importance of intervening at the cognitive level has been emphasised in the majority of suicidal theory and empirical research. Researchers focused that how cognitive processes leads to positive or negative thoughts. The cognitive method of transforming sensory data from the present or past is referred to as cognition. 1984 (Zajonc). Suicidal behaviour is also referred to by some experts as "mainly a state of mind" (Freeman & Reinecke, 1993). According to the theories and empirical risk factor studies, researchers to

the concluded that, even after adjusting for depression and the severity of psychopathology, there still cognitive differences between suicidal and nonsuicidal individuals (Weishaar & Beck, 1990). Hopelessness is one of the cognitive difference as it varies individual to individual (Bonner & Rich, 1988; Cole, 1989; Ellis, 1986; Weishaar & Beck, 1990). Cognitive differences also include problem-solving (Linehan et al., 1987; MacLeod et al., 1992; Westefeld et al., 2000), dichotomous thinking (Neuringer & Lettieri, 1971; Shneidman, 1987), rigidity in cognition (e.g., Ellis, 1986; Weishaar & Beck, 1990), negative or maladaptive automatic thoughts (Bonner & Rich, 1987) and the purpose of life (Rogers, 2001). It has been demonstrated that positive cognitive styles associated with high levels of subjective and psychological well-being and provide resilience against ideation/behavior (Miranda, 2012). Marital quality may also be connected with cognitive limitations and unfavorable cognitive evaluation styles in part (as compared to unmarried persons). This may affect psychological distress levels, stress exposure, and healthy lifestyles. They collectively contribute to cognitive decline over time (Lee et al., 2010).

Some researcher defined suicidal ideation as "thoughts of action as the reason of one's own death" (American Psychiatric Association, 2003). There are many levels of severity for suicidal ideas or thoughts. The less serious types, which include general beliefs about death (such as the belief that dying would be easier) and suicide (such as the responses of people if an attempt were made), and the more serious types, which include present intentions and/or desires to die by suicide) (Reynolds, 1991). Suicidal ideation is considered to affect between 30% and 70% of the population, based on the previous study's techniques and selected demographic (Kann et al., 1998; Rich & Bonner, 1987; Rudd, 1989). Suicidal ideation may not always lead to self-harm or attempts at suicide, yet people have talked to others about

their intentions to commit suicide. It is challenging to distinguish between those who will act on their ideas and those who won't (Linehan & Shearin, 1988).

Previous studies indicated the importance of cognitive factors such as automatic thought processes (Choon et al., 2015) and threat appraisal linked with suicidal ideation and consequently leads to suicide (Rogers & Joiner, 2017). Most of the cognitive characteristics that are associated with suicide have been studied in the past and can be described as irrational thoughts, such as hopelessness, rigidity, and dichotomous thinking. Additionally, criticizing ones self, overgeneralization, selective abstraction or biased thinking, negative automatic thinking and personalisation are cognitive distortions associated with suicidal ideation and attempts (Freeman & Reinecke, 1993). These cognitive distortions may have a damaging effect since they may increase serious emotional issues, such as depression, which may be connected to suicidal ideations and behaviors (Freeman & Reinecke, 1993). In the United States, emerging adults, or young people between the ages of 18 and 29 (Arnett, 2000), had greater rates of suicidal ideation, suicide planning, and suicide attempts than older ones (Centers for Disease Control and Prevention, 2011)

Suicidal thoughts and actual suicide attempts are two different things. More of the factors that have a role in the progression from suicidal thought to suicidal behaviour must be taken into account. In their 2018 study, Saffer and Klonsky examined 14 previous studies that compared the neurocognitive capacities of suicide attempters and suicidal ideators. The majority of studies indicated that, with the exception of inhibition and decision-making, scores on neurocognitive ability tests between suicide attempters and suicidal ideators were comparable. Specifically, one logistic regression study of 40 suicidal ideators and 37 suicidal ideators who had already attempted suicide was conducted. The study's findings showed that

while suicidal ideators had stronger problem-solving skills than suicide attempters in a neuropsychological battery, suicide attempters had worse attention control as measured by the stroop condition (Burton et al., 2011).

Suicidal ideation is associated with a number of additional risk factors, including nearby risk factors like life events (Rew et al., 2016) and perceived stress, as well as distant risk factors like temperamental traits (e.g., impulsivity) and cognitive factors (i.e. negative cognitive style) (Cole et al., 2015; Stange et al., 2015). Additionally, previous research has demonstrated that affect has consistently been recognized as a significant predictor of suicide thoughts (Law et al., 2015). Suicidal ideation has been associated with individual experiences of various emotional states after adjusting for other variables including personality (Liu, 2004). Additionally, it's generally stated that Women are typically thought to be more sensitive to psychological trauma than males (Thayer et al., 2003)

Past study suggested that positive cognitive style has independent, fruitful consequences on psychological health and physiological function (Dockray & Steptoe, 2010; Garland et al., 2010; Koval et al., 2013). Studies have shown that low levels of positive cognitive style are more relevant than high levels of negative cognitive style in explaining hopelessness, which is 1.3 times more significant than depression for explaining suicide ideation (Beck et al., 1993; Bryan et al., 2013). Similarly, in a prior study, negative appraisal style was unrelated to the manifestation of suicidal ideation, but lower frequencies of positive appraisal ere associated with shorter intervals in developing suicidal thoughts (Yen et al., 2004).

Previous research had identified a number of cognitive vulnerabilities, including a number of negative cognitions and appraisals, as possible mechanisms underlying the

development and maintenance of suicidal behavior and ideations (Becker, 2010). Despite a paucity of research examining both cognitive styles and distortions, researchers have found a number of negatively cognitive style or distorted cognitions that are associated with an increased risk of suicide ideation and attempts. Suicidal thoughts and behavior can vary by the degree of suicidal intent, that is, the "individual's desire to bring about his or her own death" (Hasley et al., 2008).

Based on these results, it can be said that a suicidal intender thinks differently than a person who isn't contemplating suicide. There is also increasing evidence suggesting that those who are suicidal may have different emotional states than people who are not, however there is less study to defend this conclusion (Hasley et al., 2008).

### 2.5 Theoretical Framework

The current study is based on the Lazarus theory of stress and appraisal.

2.5.1 The Lazarus Theory. One of the most well-known theories of stress is the Transactional Model of Stress and Coping (TMSC), proposed by Lazarus and Folkman in 1984. According to Lazarus, stress is a result of a relationship between an individual's complex environment and their numerous systems, including their cognitive, physiological, emotional, psychological, and neurological functions. The primary, secondary, and reappraisal components of Lazarus and Folkman's (1984) model of stress assessment provide more explanation of the idea of interpretation. It is important to first assess whether the stressor is harmful known as primary appraisal. Secondary appraisal represents the individual's assessment of the capabilities or coping mechanisms at his or her disposal for dealing with any perceived threats. Reappraisal is a continuous process that involves reevaluating both the nature of the stressor and the resources available to respond to it.

Furthermore, according to Lazarus, stress is felt when a person believes that "demands surpass the individual's capacity to utilize personal and social resources" and his is the basis tenant of transactional model of stress and coping. Stress is defined by how an individual perceives their psychological state, not by an environmental occurrence or by how they react to it. Lazarus argues that rather than the stressful event itself, the consequences of stress on an individual depend more on that individual's perceptions of threat, vulnerability, and coping skills. According to him, psychological stress is a specific interaction between the person and environment that is seen by the individual as exhausting or surpassing his or her resources and harming his or her wellness.

2.5.2 Primary Appraisal. The cognitive process known as primary appraisal takes place when a person evaluates whether or not an incident is stressful and relevant to them. In this phase, a person determines if the situation threatens him, will result in loss or damage, or will be a challenge for him to overcome. Harm that has already taken place, such a death or the loss of a job, is associated with harm or loss. Threat is the likelihood of future damage or loss, such as illness or poor performance at work. On the other hand, a challenge is a situation that offers someone the chance to feel competent and in command by confronting and resolving a problem. Such a challenge would be regarded as a constructive form of stress and enables one to broaden one's knowledge and experience as well as build additional skills to handle difficulties or stresses in the future. A challenge may include completing a marathon or publishing a book (Lazarus, 1963).

Additionally, while deciding if a situation is harmful or helpful, important or unnecessary to our situation. The following three aspects need to be assessed: 1. Is the threat

significant to that individual? 2. the interaction is fruitful or not? 3. Is it unpleasant, harmful, or challenging? The following negative emotions may occur if a person decides that the situation is harmful i.e. worry, anxiety, a fear reaction, a challenge (Lazarus, 2018).

2.5.3. Secondary Appraisal. The cognitive process known as secondary appraisal takes place while a person is determining how to handle a difficult situation. During this phase, a person determines what coping mechanisms are accessible to him to assist him in that dangerous situation. A damaging situation requires a quick assessment of available coping mechanisms as it has already happened, whereas threatening or stressful situations give one time to discover more about what has happened. A frame of reference is provided by prior experience or exposure to situations similar to the current one in order to evaluate the possibilities for resolving it (Lazarus, 1999).

Additionally, when a person assesses the resources that are available to him to serve him fight or manage the stressor, the individual may choose to use internal resources i.e. internal strength, self efficacy, or may use peers and expert help as external resources. In order to deal with the problem, a person needs both internal and external support (Lazarus, 2018).

Lazarus also stated that when a person using primary and secondary appraisal then he also make some coping strategies to cope with that problem. These are of two types i.e. emotion focused strategies and problem focused strategies. (Beck, 1986)

The cognitive appraisal is often applied in uncertain circumstances where there is little knowledge to guide an individual's ation plan. In these situations, a person's performs a two-step appraisal process to determine what happened and how he or she should respond.

Primary appraisal, the initial phase, involves assessing how the interaction or event will impact you personally. For instance, if a person found that 10 employees at his organisation will be laid off then his initial reaction will be to consider how that could effect you. The first assessment's findings will determine the process's following stage, the secondary appraisal, in which the individual assess the contributing elements and choose how to react (Lazarus, 2020)

**2.5.4 Problem-Based Coping.** People adopt a variety of stress-reduction techniques when they think they can handle the problem's cause and have control over the situation. To manage stress, an individual use these four steps: 1. Identify the problem, 2. Create alternative solutions, and 3. Create new stress skills. 4. Reconsider and set new behavioural standards.

**2.5.5 Emotional-Based Coping**. It is used hen a person feels they are unable to control the cause of the problem. It requires developing stress-management techniques. Some examples include avoidance (I'm not attending school), Distancing (from the stress, "it doesn't matter"), acceptance (I failed that test, but I have four other courses), seeking medical help, and turning to alcohol are the top five ways to deal with stress.

The Transtheoretical model of stress and coping focuses on the connection between the individual and their environment, in comparison to other theories on stress, such as the flight-or-fight theory (Cannon, 1929) and the general adaption syndrome hypothesis (Seyle, 1956). According to Lazarus (1966), a person's perception of their own stress is significantly influenced by how they interpret a scenario. According to Lazarus and Folkman (1984), stress is "a specific relationship between the person and the environment that the individual sees as exhausting or surpassing his or her resources and hurting his or her well-being".

Two concepts are essential to any theory on psychological stress: appraisal (individuals' evaluation of the significance of what is happening for their well-being), and coping (individuals' efforts in thought and behavior to handle particular demands) (Lazarus, 1993). The Lazarus stress hypothesis has undergone several revisions since it was initially presented as a full theory (Lazarus 1966). (Lazarus & Folkman, 1984). Nowadays, stress is understood to be a relational concept rather than a specific pattern of physiological, behavioral, or psychological responses to a given sort of external stimuli (Lazarus 1991). Stress is now seen as an interaction and exchange between people and their surroundings. The definition of psychological stress is "a relationship with the environment that a person views to be crucial for his or her well-being and in which the demands stress or surpass existing coping mechanisms." According to this concept, coping and cognitive evaluation serve as the two main mediators in the person-environment interaction (Lazarus & Folkman, 1986).

The appraisal concept introduced into emotion research by Arnold (1960) and extended on in relation to stress processes by Lazarus, is critical for understanding stress-related transactions. This concept is founded on the premise that emotional processes (including stress) are influenced by actual expectations that people have about the significance and outcome of a particular encounter. Richard Lazarus stood up for thoughts

and feelings. He studied people's stress levels and said that events are not good or bad, but the way we think about them is positive or negative, and therefore has an impact on our stress levels. This concept is required to explain individual differences in the nature, intensity, and duration of an aroused emotion in apparently equal conditions for different individuals. The resulting condition is often thought to be formed, maintained, and eventually altered by a specific pattern of appraisal. These appraisals, in turn, are influenced by a variety of personal and situational aspects. On the personal side, the most essential components are motivational dispositions, goals, values, and generalized expectations. Predictability, controllability, and the probability of occurrence of a potentially stressful event are all relevant situational characteristics (Lazarus & Launier, 1978).

# Chapter 3

## 3. RESEARCH METHODOLOGY

## 3.1 Research Design

The current research was supposed to examine the impact of the unemployment stress and suicidal ideation among adults and to study the mediating role of cognitive appraisal i.e. challenge cognitive appraisal style and threat cognitive appraisal style. To meet the objectives of the study, a cross-sectional correlation research design was followed. To measure the unemployment stress, Unemployment stress scale was developed in present study. For other variables of this study, existing scales were used i.e. suicidal ideation attribution scale and cognitive appraisal style scale. These scales were already used on population. The current study was conducted in three phases to fulfill these objectives.

- **3.1.1 Phase-I: Development of Unemployment Stress Scale.** The unemployment stress scale (UESS) was devised during the study's early phase to measure the stress of unemployed adults. In Pakistan's indigenous perspective, additional study scales have already been developed and validated.
- **3.1.2 Phase -II: Pilot study.** The second phase of the research included the pilot study which is conducted to validate the unemployment stress scale (UESS), develop other psychometric properties of the study scales (such as reliability coefficients and item-total correlations), and investigate the relationship between the study variables,
- **3.1.3 Phase -III: Main study.** The third part of the research included the main study, which was primarily focused on testing the study's hypotheses.

## 3.2 Phase-I: Development of Unemployment Stress Scale (UESS)

In the first phase of the study, UESS was developed to explore unemployment stress among adults if they had experience. Although a scale i.e. Unemployment Stress Scale (Arnout, 2019) have been establish in the Egyptian culture to assess unemployment stress in unemployed adults but some due to unavailability of that scale an appropriate instrument was needed to measure unemployment stress. Therefore, the current study devised a scale to overcome these gaps and specifically focused on the adult population. Items were developed in consideration of their nature of the unemployment stress that experienced by adults. In the following steps, development of scale was done.

**3.2.1 Step -I: Literature review.** The study's initiation step included a review of the literature on the stress caused by unemployment. Many stressors were identified from the literature that creates stress during unemployment i.e. financial crises. Moreover, one questionnaire of unemployment stress was used in the previous study but scale was not available (Arnout, 2019).

3.2.2 Step -II: Focus Groups Discussions (FGDs). Five Focus Group Discussions (FGDs) were held with unemployed adults at the study's second step to gather the general perspective on unemployment stress. First focus group was conducted with adults (N = 8; 2 females and 6 males) ranging from 23 to 30 years of age. The second focus group was administered with adults (N = 10; 2 females and 8 males) ranging from 27 to 35 years of age. Further third focus group was administered with adults (N = 9; 3 females and 6 males) ranging from 32 to 40 years of age. Fourth focus group was administered with adults (N = 8; 1 female and 7 males) ranging from 40 to 50 years of age. Fifth focus group was administered with adults (N = 8; 1 female and 7 males) ranging from 40 to 50 years of age. Fifth focus group was administered with adults (N = 10; 3 females and 7 males) with an age ranged from 35 to 50

years. The purpose of these focus group discussions was to explore the local diversities regarding unemployment stress e.g. a period of unemployment may be considered as "stressful" in some middle class but that period of unemployment may not be considered as much stressful in elite class in Pakistani context. A focus group guide was prepared before the discussion with unemployed groups. The focus group guide was consisting of nine questions. The queries were made in a certain order. Each FGD took between 40 and 50 minutes to complete after participants had been briefed on the nature and goals of the study. Data was collected, analyzed, and scale items were extracted once each FGD was finished.

**3.2.3 Step -III:** Generation of item pool. The third step was writing the items based on the gathered data through a thorough literature review and focus group discussion. 45 items were generated at this step after reviewing literature and discussion in focus groups. Some aspects were reported in a previously established scale by reviewing literature of unemployment stress (Arnout, 2019). But due to unavailability of that scale, the new scale was developed. Development of scale was done in a format where subjects indicate unemployment stress on a 5-point rating scale (i.e., strongly agree=1, agree = 2, neither agree nor disagree = 3, disagree = 4, strongly disagree=5). The total UESS score is computed by adding the impact ratings of each scale item.

3.2.4 Step-IV: Subject matter experts' review. Once the items are written, the scale was critically reviewed by a committee of three subject matter experts at the fourth step. Three Ph.D. faculty members were on the expert committee from the department of Applied Psychology, NUML. They had good knowledge of psychometrics i.e. the development of the scale, its administration process and standardization of psychological tests. Experts were requested to review the content of the scale. They reviewed the scale's

language, its applicability to the stress associated with unemployment, the clarity of the contents, the appropriateness of the items, the structure, and the face validity of each item. Five elements were deleted from the scale after being jointly approved by the reviewers because they were considered to be irrelevant. Experts advised to rephrase few items, but the majority items were considered to have acceptable face validity.

**Step-V: Finalization of items pool.** At the fifth step, after adding and incorporating the recommendations of the subject matter expert, a scale with 40 items was finalized for using and testing in the pilot study.

**3.2.5 Stage-VI: Pilot testing of the questionnaire.** The final step was pilot testing of the questionnaire. It was done in the pilot study. 70 unemployed people who had experienced unemployment stress and worried about employment were taken as sample for the pretesting of the scale. The pilot testing aimed to establish the psychometric properties of UESS

In addition to the unemployment stress scale, other measures utilized in this study, included, suicidal ideation attribution scale (Spijker et al., 2014) and cognitive appraisal style (Skinner & Brewer, 2002).

#### 3.3 Instruments

The pilot study used the following instruments.

**3.3.1. Unemployment Stress Scale.** In the first phase of this study unemployment stress scale was developed. UESS consists of 40 items which was devised from the literature and focus group discussion. This instrument was based on a likert type scale on which adults rate themselves to what extent they have experienced unemployment stress on a 5-point rating scale (i.e., Strongly Agree= 1, Agree= 2, Neither Agree Nor disagree=3, Disagree=4,

Strongly Disagree = 5). The total UESS score is computed by adding the impact ratings of each scale item. There is no reverse coded item in this scale.

**3.3.2. Suicidal Ideations Attributes Scale.** The Suicidal Ideation Attribution Scale was developed by Spijker et al. in 2014. The suicidal ideation attribution scale is used to assess if a person has suicidal ideation. The severity of these suicidal ideas is also determined by it. There are five of them. Each of the different indicators, controllability, closeness to an attempt, frequency, level of stress associated to the thoughts, and impact on everyday functioning, targets a characteristic of suicidal ideation. A 10-point scale is used to rate responses. A higher overall score suggests more severe suicidal ideation due to the way the items are categorized. The SIDAS had a high level of internal consistency (Cronbach alpha = 0.91). In the past researches all items had absolute factor loadings greater than 0.6, indicating that the attributes of suicidal ideation measured appear to contribute to a unidimensional construct of suicidal ideation. The SIDAS total score has shown good convergent validity with the Columbia-Suicide Severity Rating Scale frequency item (r=0.61), duration item (r=0.50), and controllability item (r=0.44). The cutoff score of 21 on the SIDAS may be used to indicate high risk of suicidal behaviour (Spijker, 2014). The sum of the five SIDAS items, with controllability reverse-scored, provides the final scores of this scale (10=0, 9=1, 8=2, 7=3, 6=4, 5=5, 4=6, 3=7, 2=8, 1=9, 0=10). Total scores range from 0 to 50.

**3.3.3.** Cognitive Appraisal Style. The cognitive appraisal style questionnaire was developed by Skinner and Brewer in 2002. The overall scale measures two types of cognitive appraisal styles i.e. challenge cognitive appraisal style (positive appraisal) and threat cognitive appraisal style (negative appraisal). Items 1, 3, 4, 7, 8, 12, 13, 16, 21, 22, 24,

25, 26 measures challenge cognitive appraisal. Whereas items 2, 5, 6, 9, 10, 11, 14, 15, 17, 18, 19, 20, 23 measures threat cognitive appraisal. Both the subscales consist of 13 items using a 6-point Likert scale (i.e., Strongly disagree=1, Slightly disagree=2, Disagree=3, Agree=4, Slightly Agree=5, Strongly agree=6). Challenge\_Trait:  $\alpha$  = .72, Threat\_Trait:  $\alpha$  = .92, Challenge State:  $\alpha$  = .65 and Threat State:  $\alpha$  = .76 (Skinner & Brewer, 2002).

**3.3.4. Consent form with demographic sheet.** A consent form was given to participants to take willingness. Instruments were attached with the relevant demographic sheet in order to collect the participants' required demographic data. This data included age, gender, family structure, number of siblings, birth order, education, marital status and family income etc.

## 3.4 Sample

The study was conducted on 300 (males = 200, females =100) unemployed adults with an age ranged from 23 - 50 years (M = 28.82, SD = 4.77). Data was collected from graduate and post-graduate students of various universities of Rawalpindi and Islamabad and through personal contacts of researcher. Only those individuals were included in the study who were unemployed since, at least, the last one year and were actively looking for some employment and were in serious need of employment. Those individuals were excluded who were unemployed but were not in need of any employment.

# 3.5 Sampling Technique

In the current study, purposive convenient sampling technique was used for the purpose of data collection.

#### 3.6 Data Collection

Researcher approached participants through personal contacts and further data was collected from Post- graduate students of different universities of Rawalpindi and Islamabad and collected the data. Researcher provided a brief explanation of the nature and objective of the study and provided assurances on all aspects of research ethics while gathering information from adults. In exchange for their consent to participate in the study, they were assured the right to privacy and confidentiality as well as the right to stop at any time. A consent form was used to obtain their consent and along with demographic data. Then the booklet of questionnaires [i.e. Unemployment Stress Scale (UESS), Suicidal Ideation Attribution Scale (SIDAS) and Cognitive Appraisal Style (CAS)] was handed over to the participants. The inclusion criterion was only those adults who had experience unemployment continuously for at least the last one year. Again the tests were given to each participant individually. It took each participant about 20 minutes to finish the questionnaire.

### 3.7 Data Analysis

The data was analyzed by SPSS 20 version. After the data entry into the data editor, data cleaning was done to locate the missing values and outliers. Some missing values were found which were replaced with the mean value. No outliers were found in the data. Different analysis was done on the data after data entered. Analysis were reliability analysis, inter scale correlation, item total correlation, regression, t-test, anova and mediation. After the analysis the results were reported and discussed.

#### 3.8 Research Ethics

At the initial stage of data collection, informed consent were given to the

participants to ensure their willingness in the research. Researcher provided a brief explanation of the nature and objective of the study and provided assurances on all aspects of research ethics while gathering information from adults. In exchange for their consent to participate in the study, they were assured the right to privacy and confidentiality as well as the right to stop at any time.

# 3.9 Delimitation of the research study

In the present study, only unemployed adults were taken as a sample age range between 23-50. Other age groups, underemployed and employed individuals were not considered in this research.

## 3.10. Phase-II: Pilot Study

- **3.10.1 Objectives.** With the following objectives, a pilot study was conducted:
- To validate Unemployment Stress Scale (UESS) developed in the present study (Phase I).
- 2. To determine the psychometric characteristics of all the study scales.
- 3. To explore the trends of relationship between the studyvariables
  - **3.10.2** Sample. The sample of pilot study comprised 70 Adults (Males = 60, Females = 10) with an age ranged from 23 to 50 years (M = 28.79, SD = 4.84). Sample was collected by purposive convenient sampling method. Data was collected using personal contacts of the researcher and from Post-graduate students of different universities of Rawalpindi and Islamabad. The researcher addressed each participant individually and briefly described the objectives and design of the study to them. Participant's unemployment stress was assessed through unemployment stress scale (UESS). The

inclusion criterion was at least one continuous last year with unemployment. Along with the unemployment stress scale, other study scales were also administered combined in a booklet. Moreover, to achieve the pilot study's objectives, the data was used.

The frequency and percentages of the demographic variables of the final sample are shown in Table 1 below. Among the total sample of 79 for the pilot study, 9 participants data was discarded due to incomplete information. After that remaining data of 70 participants were used for pilot study from which 86% were males and 14% were females, 94% age range was 23-33 (Early Adults) and 6% age range was 34-50 (Middle Adults), 44% belonged to joint family system and 56% living in nuclear family system. 61% participants were single and 39% participants were married. 19% belongs to lower income group, 54% belongs to middle income group and 27% belongs to higher income group respectively. There was 11% attrition rate.

**3.11. Table 1**Frequencies and Percentages of Demographic Characteristics of the Sample (N = 70)

Variables	F	%
Gender		
Males	60	86
Females	10	14
Age		
Early Adults (23-33)	66	94
Middle Adults (34-50)	04	6
Family System		
Nuclear	39	56
Joint	31	44

Marital Status		
Single	43	61
Married	27	39
Family Income		
Lower income group (≤ 40000)	13	19
Middle income group (410000-70000)	38	54
High income group (≥ 710000)	19	27
Year of Unemployment		
1 year	39	56
More than 1 year	31	44

## 3.12. Procedure

The researcher approached each person individually. A brief explanation of the nature and goals of the research was given by the researcher to the participants. Data was collected through personal contacts and from Post-graduate students of different universities of Rawalpindi and Islamabad by using purposive convenient sampling technique. At first, informed consent from the participants (along with demographic sheet) was obtained then other research ethical guidelines were also ensured, such as giving participants the full freedom to end their participation in the study at any time. Participants received assurance on their rights to privacy, confidentiality and also guarantee that their data will be used just for this study and kept completely confidential.

At first a booklet of unemployment stress scale (UESS), suicidal ideation attribution scale (SIDAS) and cognitive appraisal style scale (CAS) was handed over to the participants to fill up. The inclusion criterion was at least one continuous last year with unemployment. Instruments were administered individually and through the researcher

contacts and from the post graduate university students of Rawalpindi and Islamabad. To complete the questionnaire, each individual took almost 20 minutes. After taking the necessary data, statistical analysis were done. SPSS 20 version was used to compute the results.

#### 3.13 Results

Results of the pilot study, including UESS validation, are reported in this section of the study. Also other psychometrics for the study scales i.e. suicidal ideation attribution scale (SIDAS) and cognitive appraisal style subscales i.e. challenge cognitive appraisal style (CCAS) and threat cognitive appraisal style (TCAS) psychometric properties included reliability estimates and item-total correlations are reported.

The unemployment stress scale (UESS) consists of a list of distinct stressors that a person may face as a result of being unemployed that are not experienced by other people who are employed and living life to the fullest. In order to examine the scale's psychometric strength and validate it, the current study established content validity for UESS.

## 3.14. Content Validity of UESS

The degree to which test items represent the construct being studied or the desired construct is referred to as content validity (Beck & Gable, 2001; Mastaglia, et al., 2003). This form of validity is established by depending on the judgment of acknowledged experts in the relevant field about several criteria, such as applicability, clarity, comprehension, and/or whether the item is necessary or not. Through the expert ratings for each item, the content validity of UESS was established. Three experts with extensive backgrounds in psychological testing and psychology analyzed the items. All were Doctors of psychology

and also professors at National University of Modern Language, Islamabad. Each item was rated according to several criteria, such as whether it was "important or not," "suitable or not," "relevant or not," and "adequate or not" to be kept on the scale. Rating scale was appropriate according to experts. At this point, none of the items were deleted because each one met the minimal requirements established by the experts for retention.

3.15.Table 2

Inter-scale correlation, alpha coefficients, and descriptive statistics of the study variables
(N=70)

	1	2	3	4
1. UESS	-	.46**	65**	.68**
2. SIDAS	-	-	76**	.76**
CCAS	-	-	-	95**
3. TCAS	-	-	-	-
$\alpha$	.94	.66	.93	.90
M(SD)	126.86(25.53)	32.24(7.50)	27.74(16.67)	60.31(18.89)
Skewness	06	-1.04	1.85	-1.71
Kurtosis	.62	0.87	1.89	1.34
Range				
Actual Range	53-195	9-45	13-72	16-77
Potential Range	40-200	0-50	13-78	13-78

<sup>\*\*</sup>p<.01

Note: UESS = Unemployment Stress Scale; SIDAS = Suicidal Ideation Attribution Scale; CCAS = Challenge Cognitive Appraisal Style; TCAS = Threat Cognitive Appraisal Style

Table 2 shows alpha coefficients, means, standard deviations, skewness, kurtosis and range i.e. actual and potential range for Unemployment Stress Scale, Suicidal Ideation

Attribution Scale and Cognitive Appraisal Style Questionnaire (i.e. Challenge cognitive appraisal Style and Threat cognitive appraisal Style).

Inter-scale correlations between the study's variables are also shown in Table 2. Results revealed that the unemployment stress scale had significant positive correlations with suicidal ideation attribution scale among adults. Cognitive appraisal style subscales i.e. challenge cognitive appraisal style showed significant negative relationship with threat cognitive appraisal style. Unemployment stress indicated a significant negative association with challenge cognitive appraisal style and a significant positive association with threat cognitive appraisal style. Suicidal ideation attribution scale showed a significant negative relationship with challenge cognitive appraisal style while a significant positive correlation with threat cognitive appraisal style. Unemployment stress scale and suicidal ideation attribution scale also showed significant positive correlation. These findings depict the relationship between the study variables. It also provides a baseline to test objectives and hypotheses of the main study.

**3.16. Table 3** *Item Total Correlation and Corrected Item Total Correlation of Unemployment Stress Scale*(N=70)

Item	Item-Total-	Corrected Item-Total-	Item	Item-Total-	Corrected Item-Total-
	Correlation	Correlation		Correlation	Correlation
1	.59**	.57	21	.57**	.56
2	.58**	.57	22	.56**	.54
3	.72**	.70	23	.61**	.59
4	.54**	.52	24	.57**	.56
5	.59**	.58	25	.51**	.50
6	.48**	.46	26	.72**	.71
7	.71**	.69	27	.68**	.67
8	.53**	.52	28	.38**	.36
9	.68**	.67	29	.60**	.59
10	.61**	.59	30	.58**	.56
11	.61**	.59	31	.52**	.50
12	.68**	.57	32	.38**	.37
13	.57**	.56	33	.46**	.44
14	.51**	.50	34	.53**	.51
15	.60**	.58	35	.59**	.57
16	.46**	.44	36	.53**	.52
17	.66**	.65	37	.48**	.46
18	.65**	.63	38	.59**	.57
19	.47**	.45	39	.48**	.46
20	.57**	.55	40	.44**	.42

<sup>\*\*</sup>p<.01

To assess the internal consistency of all the research scales, item-total correlations were computed for each scale and its subscale. The item-total correlation for the Unemployment Stress Scale (UESS) is seen in Tables 3 .ranged from .38\*\* (p<.01) to .72\*\* (p<.01) and its corresponding corrected item correlation ranged from .37 to .69. The scale is internally consistent, as shown by the fact that all of the items have significant positive correlations with the overall score, depicts that it is reliable enough to use in the main study for hypotheses testing.

3.17. Table 4

Item Total Correlation and Corrected Item Total Correlation of Suicidal Ideation Attribution

Scale (N=70)

Item	Item-Total-Correlation	Corrected Item-Total-Correlation
1	.60**	.51
2	.79**	.71
3	.62**	.53
4	.82**	.77
5	.51**	.34

<sup>\*\*</sup>p<.01

Item-total correlations were calculated to assess the internal consistency of the study variable i.e. Suicidal Ideation Attribution Scale (SIDAS) in Table 4. The item-total correlation ranged from .51\*\* (p<.01) to .82\*\* (p<.01) and its corresponding corrected item correlation ranged from .34 to .77. All the items have significant positive correlations with its overall score of the scale indicating that the scale has internal consistency and is reliable enough to use in the main study for hypotheses testing.

3.18.Table 5

Item Total Correlation and Corrected Item Total Correlation of Cognitive Appraisal Style Scale with its Sub-Scales (N=70)

Item	Item-Total-	Corrected Item-	Item	Item-Total-	Corrected Item-
	Correlation	Total-Correlation		Correlation	Total-Correlation
	Challenge			Threat	
1	.50**	.43	2	.56**	.50
3	.44**	.38	5	.40**	.34
4	.45**	.39	6	.35**	.29
7	.44**	.38	9	.51**	.46
8	.56**	.51	10	.63**	.58
12	.63**	.57	11	.65**	.60
13	.61**	.56	14	.62**	.57
16	.66**	.61	15	.49**	.43
21	.52**	.47	17	.58**	.53
22	.42**	.37	18	.49**	.43
24	.42**	.37	19	.60**	.55
25	.58**	.52	20	.62**	.58
26	.46**	.41	23	.46**	.44

\*\*p<.01

In Table 5, item-total correlations were computed for subscales of Cognitive Appraisal Style (i.e. Challenge Appraisal Style and Threat Appraisal Style) which ranged from .35\*\*(p<.01) to .66\*\*(p<.01). The scale is internally consistent as shown by the fact that all of the items have significant positive correlations with the total score and reliable

enough to use in the main study for hypotheses testing.

#### 3.19. Discussion

Pilot study was primarily aimed at determining the research scale's psychometric properties and estimating the trends in the relationships between the study variables. UESS (which was developed in the first part of this study) and was comprised different steps. The first step in the development of unemployment stress scale was reviewing of literature to identify different stressors that a person may face as a result of being unemployed that are not experienced by other people who are employed. Then the second step was the focus group discussion in which interviews were conducted. FGDs were conducted from different five groups and questions were asked from them regarding unemployment and their reviews were noted. The third step was the generation of item pool in which 45 items were generated on different symptoms of unemployment stress. As past studies also shows that stress is associates with unemployment (Beautrais, 1998). Afterwards at the fourth step subject matter experts review were considered to review the content of the generated scale. Through the expert ratings for each item, the content validity of UESS was determined. Some items were discarded and after that 40 items were finalized at the fifth step of unemployment scale validation process. Finally, at the sixth step the questionnaire was used for pre testing in the pilot study on a sample of 70 adults to establish the psychometric properties of the scale. Frequencies and percentages of the demographics were also calculated.

The purpose of the current study is to further analyze and examine at the relationship between all the study variables. Reliability coefficients and item-total

correlations, two types of psychometric characteristics, were determined for all three scales i.e. unemployment stress scale, suicidal ideation attribution scale and cognitive appraisal stress scale (challenge cognitive appraisal style and threat cognitive appraisal style).

3.19.1. Relationship between the Study Variables. Inter correlation was computed for Unemployment Stress Scale (UESS), Suicidal Ideation Attribution Scale (SIDAS), Cognitive Appraisal Style Questionnaire (i.e. challenge cognitive appraisal style (CCAS) and threat cognitive appraisal style (TCAS)). Results showed that UESS had significant positive relationship with suicidal ideation (.46) and threat appraisal style (.68). As Blakely suggests that the suicidal ideation and unemployment have association. The unemployed person suffering from stress are more likely having suicidal ideation (Blakely, 2003). A previous study also explored that an unemployment impact negatively on a person's cognitive appraisal style and then he/she appraises the situation accordingly (i.e. threat appraisal) which leads to stress (Feather & Davenport, 1981; Gowan et al; 1999; Leana & Feldman, 1990).

Furthermore, UESS has significant negative relationship with challenge appraisal style (-.65). Previous research shows that there are individual differences in cognitive appraisal styles. If a person having positive (i.e. challenge) appraisal style he she experience less unemployment stress as compared to the person having negative (i.e. threat)0 appraisal style (Biggs et al., 2017). SIDAS had significant positive relationship with unemployment stress scale (.46) and threat appraisal style (.76). Past study also shows that suicide is positively associated with unemployment stress (Johnson, Lall, Bonger & Nordland, 1999). Previous study also indicated the cognitive factors such as

automatic thought processes (Choon et al., 2015) and threat appraisal linked with suicidal ideation and consequently leads to suicide (Rogers & Joiner, 2017). Moreover, SIDAS had significant negative relationship with challenge appraisal style (-.76). Past study suggested that adopting a positive cognitive style has independent, positive impacts on mental health and reduces suicide ideation (Dockray & Steptoe, 2010).

**3.19.2. Reliability Coefficients of the Study Variables.** As a second objective of the pilot study, the psychometric characteristics of all study scales were determined. Reliability estimates and item-total correlations for unemployment stress scale (UESS), suicidal ideation attribution scale (SIDAS), challenge cognitive appraisal style (CCAS) and threat cognitive appraisal style (TCAS) were calculated to accomplish the objective.

In the present study, the Unemployment Stress Scale's Cronbach's Alpha coefficient was.94 (Table 2), showing the scale's good reliability and suitability for use with adults to measure unemployment stress. Findings of the previous research also show high reliability i.e. .96 (Arnout, 2008). Results (Table 2) have also shown moderate reliability for SIDAS (.66) indicating that SIDAS is a reliable measure to use with adults for measuring their suicidal ideation. Previous study also shows high reliability on the suicidal ideation attribution scale (Spijker et al., 2014). Challenge appraisal style and threat appraisal style also shows high reliabilities (i.e. .93 and .90) which indicate that the scale is internally consistent. Past study also shows high reliabilities of both challenge cognitive appraisal style and threat cognitive appraisal style (Skinner & Brewer, 2002). Mean, standard deviation, skewness, kurtosis, range (actual and potential range) were also computed for all the three variables. The findings revealed that the distribution of scores across all scales and their subscales is normally distributed.

3.19.3. Item total Correlations. Moreover the results of UESS item-total correlation (Table 3) were also significant and positive indicating that this construct is internally consistent and reliable. In table 4 suicidal ideation attribution scale (SIDAS) item total correlation were calculated which indicating that the scale is internally consistent and reliable enough to use in the main study for hypotheses testing. In table 5 cognitive appraisal style questionnaire i.e. challenge appraisal style item total correlation and threat appraisal style item total correlation was reported which revealed that all the items of this scale are internally consistent, reliable and enough to measure the challenge cognitive appraisal style and threat cognitive appraisal style.

## 3.20. Phase-III: Main Study

In phase-III, the main study was aimed at examining how unemployment stress had an impact on suicidal ideation among adults and examining the mediating role of cognitive appraisal (i.e. challenge cognitive appraisal style and threat cognitive appraisal style. The following objectives were the main study's focus:

## **3.20.1. Objectives.** The following objectives of main study are:

- 1. To examine the factors structure of Unemployment stress scale with adults.
- 2. To study the relationship of unemployment stress, suicidal ideation and cognitive appraisal among adults.
- **3.** To study the mediating role of cognitive appraisal (i.e. Challenge cognitive appraisal style and threat cognitive appraisal style) between unemployment stress and suicidal ideation among adults.

**4.** To examine group differences on the study variables based on demographics.

**3.20.2. Sample.** Among the total sample of 346 for the main study, 46 participants data was discarded due to incomplete information. After that remaining data of 300 participants were used for main study from which (males = 200, females =100) with the age ranged from 23-50 years (M = 28.82, SD = 4.77). Following a Purposive convenient sampling method, data was collected from Post-graduate students of different universities of Rawalpindi and Islamabad. Sample was also taken from personal contacts with the consents of participants. Among the total sample, 67% were males and 37% were females, 97% age range was 23-33 (Early Adults) and 3% age range was 34-50 (Middle Adults), 56.3% belonged to joint family system and 43.7 living in nuclear family system. 64% participants were single and 34% participants were married. 11% belongs to lower income group, 30% belongs to middle income group and 59% belongs to higher income group respectively. There was almost 13% attrition rate (Table 6).

**3.21. Table 6**  $Frequencies \ and \ Percentages \ of \ Demographic \ Characteristics \ of \ the \ Sample \ (N=300)$ 

Variables	F	%
Gender		
Males	200	67
Females	100	33
Age		
Early Adults (23-33)	291	97
Middle Adults (34-50)	09	3

Family System		
Nuclear	131	44
Joint	169	56
Marital Status		
Single	192	64
Married	108	36
Family Income		
Lower income group (≤ 40000)	34	11
Middle income group (410000-70000)	88	30
High income group (≥710000)	178	59
Year of Unemployment		
1 year	165	55
More than 1 year	135	45

**3.22. Instruments.** The following instruments (which were also utilised in the pilot study) were used in the main study:

- 1. Consent Form with Demographic Sheet
- 2. Unemployment Stress Scale (UESS)
- 3. Suicidal Ideation Attribution Scale (SIDAS)
- 4. Cognitive Appraisal Style (CAS)

**3.23. Procedure.** Data was collected through purposive convenient sampling technique. Researcher approached participants through personal contacts and further data was collected from Post- graduate students of different universities of Rawalpindi and

Islamabad. The researcher provided a brief explanation of the nature and objective of the study and provided assurances on all aspects of research ethics while gathering information from adults. In exchange for their consent to participate in the study, they were assured the right to privacy and confidentiality as well as the right to stop at any time. A consent form was used to obtain their consent and along with demographic data. Then the booklet of questionnaires [i.e. Unemployment Stress Scale (UESS), Suicidal Ideation Attribution Scale (SIDAS) and Cognitive Appraisal Style (CAS)] was handed over to the participants. The inclusion criterion was only those adults who had experienced unemployment continuously for at least the last one year. Again the tests were given to each participant individually. It took each participant about 20 minutes to finish the questionnaire.

# Chapter 4

## 4. ANALYSIS AND INTERPRETATION OF THE DATA

This section holds the results of the estimation of UESS factor structure and the main study analyses relating to hypotheses testing. The objective of main study was to investigate the impact of unemployment stress on suicidal ideation and further intended to investigate this path through a mediating link of cognitive appraisal.

**4.1. Validation of UESS.** Exploratory factor analysis (EFA) was run for Unemployment Stress Scale to estimate the factor structure of the scale.

Initially, EFA was performed using Principal Component Analysis and direct oblimin method. The minimum factor loading criteria was set to 0.3. The commonalities of the scale were assessed to variances in the dimensions of the scale to accept the levels of explanation. The result shows that all the commonalities were above the set criteria (i.e., .3). The commonalities were all above the criteria and the loadings were good. Only five items were deleted after principal component analysis which indicates that the factor structure will be disturbed and then we retained the remaining items of the measure to be developed. An individual review was taken from 2 members of the Committee comprising of Assistant Professors to confirm the factors identified in the Exploratory Factor Analysis (EFA).

To measure the significance of the correlation of measure with its components, it is important to weigh the overall significance of the correlation matrix through the Bartlett's Test of Sphericity (BTS). The results were significant,  $\chi^2$  (n=300) =8893.31 (p<.000), which indicates its suitability for factor analysis.

The Kaiser-Meyer-Olk in Measure of Sampling Adequacy (KMO-MSA), indicating the adequacy of sample and appropriateness of the data for factor analysis. The closer the value of KMO, the better it is. In our analysis, the value of KMO was 0.71 which indicate that the data was appropriate as well as adequate.

Finally, the factor solution derived from this analysis yielded 1 factor for the scale. The factor loadings, were calculated for each item (shown in the table 7), along with that eigen values, percentages of variance and accumulative variance are also reported.

Item-total correlations were carried out on the sample to examine the relationship of every item with its total score on the scale. Corrected item total correlations were also reported. On the basis of the item total correlation, choice of rotation was made. There is a significant positive correlation between each item and the scale's overall score, indicating that the scale is internally consistent and reliable.

Regression Analysis was done for all the variables. Both linear regression and multiple regression were computed with same dependent variable i.e. Suicidal Ideation. Adjusted R<sup>2</sup> also computed to determine the variation explain in dependent variable due to independent variable. Analysis was done by using 95% confidence interval.

To measure group differences for gender, marital status and family system, T-test analyses were computed on all the study variables.

ANOVA were also calculated for three groups of family income i.e. lower, middle and higher. Mediation analysis also done to examine the mediating role of cognitive appraisal (i.e. challenge cognitive appraisal style and threat cognitive appraisal style).

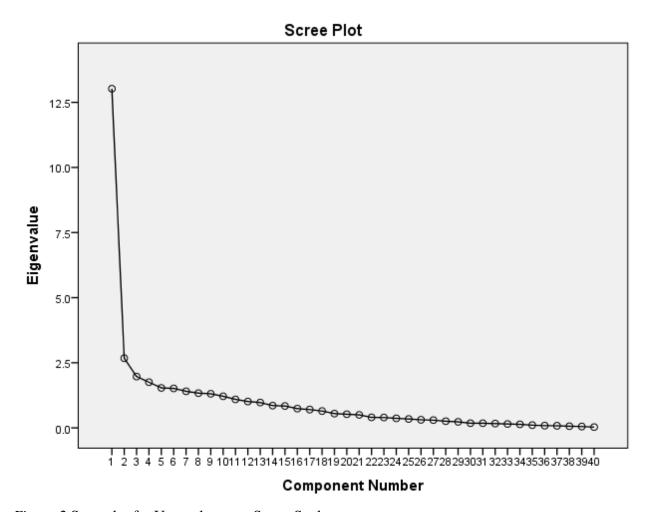


Figure 2. Screeplot for Unemployment Stress Scale

The screeplot of Unemployment Stress Scalein Figure 1 gave clear indication of one dimension of construct in current context. Item loadings of the factors were highly correlated; therefore items were analyzed by force for 1 factor solution as scree plot also suggested one factor solution. Based on the decision of screeplot's point of influx, factor loadings and percentage of variance explained, one factor solution was retained.

**4.1. Table 7**Factor Loadings, Eigen Value, Percentage of Variance Explained and Accumulative Variance Explained by One Factor Solution of Unemployment Stress Scale (N=300).

Items	Factor Loadings	
	1	.60
	2	.58
	3	.74
	4	.55
	5	.60
	6	.48
	7	.72
	8	.54
	9	.68
	10	.61
	11	.61
	12	.69
	13	.58
	14	.52
	15	.60
	16	.46
	17	.67
	18	.66
	19	.46
	20	.58
	21	.26
	22	.55
	23	.62
	24	.58
	25	.52
	26	.73

Items	Factor Loadings
27	.70
28	.25
29	.63
30	.57
31	.53
32	.07
33	.14
34	.53
35	.59
36	.52
37	.47
38	.58
39	.48
40	.23
Eigen value	13.02
Percentage of Variance Explained	32.56
Accumulative Percentage of Varia	ance 32.56

In Table 7, only factor so achieved explained an accumulated variance of 32.56%. Along with this item loading was in acceptable range (>.30). Therefore, unemployment stress scale (UESS) was taken as a unidimensional scale with 40 items measuring unemployment stress in Pakistan.

**4.2. Table 8**Item Total Correlation and Corrected Item Total Correlation of Unemployment Stress Scale
(N=70)

	Item-Total-	Corrected Item-	Τ.	Item-Total-	Corrected Item-
Item	Correlation	Total-Correlation	Item	Correlation	Total-Correlation
1	.60**	.58	19	.45**	.43
2	.59**	.57	20	.58**	.56
3	.73**	.71	21	.54**	.53
4	.55**	.53	22	.61**	.60
5	.60**	.58	23	.58**	.57
6	.50**	.48	24	.53**	.50
7	.71**	.71	25	.72**	.71
8	.56**	.54	26	.69**	.68
9	.67**	.66	27	.63**	.62
10	.61**	.59	28	.57**	.56
11	.59**	.58	29	.53**	.51
12	.70**	.68	30	.53**	.51
13	.60**	.58	31	.58**	.57
14	.52**	.50	32	.52**	.51
15	.60**	.58	33	.47**	.45
16	.48**	.46	34	.59**	.57
17	.68**	.66	35	.48**	.46
18	.66**	.66			

<sup>\*\*</sup>p<.01

Results in Table 8 showed that each item has a significant positive correlation with the scale's total score. These findings show that the scale is internally consistent and enough reliable to use.

**4.3. Table 9**Inter-scale correlation of the study variables (N=300)

1	2	3	4
-	.44**	64**	.66**
-	-	75**	.75**
-	-	-	95**
-	-	-	-
		44** 	44**64** 75**

<sup>\*\*</sup>p<.01

Note: UES = Unemployment Stress; SIDAS = Suicidal Ideation; CCAS = Challenge cognitive appraisal Style; TCAS = Threat cognitive appraisal Style

Table 9 shows the results of bivariate correlations between UES, SI, CCAS and TCAS. Values indicate significant (\*\*p<.01) positive correlation between Unemployment Stress, suicidal ideation and threat cognitive appraisal style and negative relationship between challenge cognitive appraisal style.

**4.4.Table 10**Linear Regression Analysis on Adults' Suicidal Ideation by Unemployment Stress (N=300)

	S									
				<u>95%</u>	<u>6 CI</u>					
	B	SE B	β	T	LL	UL				
Constant	17.06	1.85	-	9.23	13.42	20.70				
UES	.14	.02	.44**	8.38	.11	.17				
$R=.44, R^2=.19, \Delta R^2=.19 (F=70.29**)$										

<sup>\*\*</sup>p<.001

*Note:* UES = Unemployment Stress

In Table 10, linear regression analysis was done to examine the impact of unemployment stress on suicidal ideation among adults. Findings revealed that unemployment stress explained 19% of variability in suicidal ideation among adults with significantly high F ratio ( $\Delta R^2 = .19$ , F = 70.29, p < .001). According to the beta weights, an increase of 1 unit in the unemployment stress will increase suicidal ideation by .14 units (B = .14,  $\beta = .44$ , p < .001). Overall results depict that higher level of unemployment stress significantly increases suicidal ideation among adults.

**4.5. Table 11**Multiple Regression Analysis on Adults' Suicidal Ideation by Cognitive Appraisal (N=300)

	Sı									
				<u>95% CI</u>						
	B	SE B	β	T	LL	UL				
Constant	27.86	4.16	-	6.69	19.67	36.05				
CCAS	18	.05	39**	-3.36	28	07				
TCAS	.15	.05	.38**	3.28	.06	.24				
$R=.76, R^2=.57, \Delta R^2=.57 (F=200.28**)$										

<sup>\*\*</sup>p<.001

*Note:* CCAS = Challenge Cognitive Appraisal Style, TCAS = Threat Cognitive Appraisal Style

In Table 11, Multiple regression analysis was done and the findings revealed that challenge cognitive appraisal style explained 57% of variability in suicidal ideation among adults with significantly high F ratio ( $\Delta R^2 = .57$ , F = 200.28, p < .001). According to the beta weights, an increase of 1 unit in the challenge cognitive appraisal style will decrease suicidal ideation by .18 units (B = -.18,  $\beta$  = -.39, p <.001). Threat cognitive appraisal style's Adjusted R<sup>2</sup> ( $\Delta R^2 = .57$ ) value of .57 indicates that it accounted for 57% of the variation in suicidal ideation among individuals with a significantly high F ratio ( $\Delta R^2 = .57$ , F = 200.28, p < .001). According to the beta weights, an increase of 1 unit in the threat cognitive appraisal style will increase suicidal ideation by .15 units (B = .15,  $\beta = .38$ , p < .001). Overall results in above table indicate that threat cognitive appraisal style is more likely to cause reduction in suicidal ideation in the targeted population.

**4.5.1 Mediation Analyses.** In order to explain the relationship between unemployment stress and suicidal ideation among adults, the mediating role of cognitive appraisal style (CAS) was examined. Process Macro was used to conduct mediation analyses of these variables (Hayes, 2013). Process, which offers many of the features of the Sobel test and interaction term in a single command (Preacher & Hayes, 2008), is basically a computational approach for evaluating path models like moderation, mediation, and their combinations (Preacher and Hayes, 2004).

4.6. Table 12 Simple Mediation of the effect of Unemployment Stress and Suicidal Ideation by Challenge Cognitive Appraisal Style (N = 300)

		SI		
Predictors	Model 1	Model 2	95%	% CL
	В	В	LL	UL
Constant	76.39***	44.06***	39.76	48.36
UES	44***	.02	05	.01
CCAS		35***	39	30
Indirect effect		16**	19	12
$\mathbb{R}^2$	.40	.56		
F	201.13***	189.94***		

<sup>\*</sup>p<.05, \*\*p<.01, \*\*\* p<.000

Note. UES=Unemployment Stress, SI= Suicidal Ideation, CCAS=Challenge cognitive appraisal style,

B= Unstandardized coefficients; LL = Lower limits; UL = Upper limit

In Table 12 mediation analysis of unemployment stress and suicidal ideation by challenge cognitive appraisal was computed. Results reveal that challenge cognitive appraisal plays a mediating role between unemployment stress and suicidal ideation among adults. The findings revealed that unemployment stress indirectly leads to suicidal ideation i.e. (B=-.16). Challenge cognitive appraisal style plays mediating role between both variables i.e. unemployment stress and suicidal ideation. However, the direct effect of challenge cognitive appraisal is less that indirect effect which shows highly significant strong mediating factor of challenge cognitive appraisal  $R^2$ = .40 value shows the variation explained due to mediating

variable i.e. challenge cognitive appraisal style in unemployment stress and suicidal ideation.

**4.7. Table 13**Simple Mediation of the effect of Unemployment Stress and Suicidal Ideation by Threat Cognitive Appraisal Style (N = 300)

		SI			
Predictors	Model 1	Model 2	95% CL		
	В	В	LL	UL	
Constant	3.11	16.05***	13.37	18.73	
UES	.52***	.03	.002	.06	
TCAS		.32***	.28	.36	
Indirect effect		.16**	.12	.20	
$\mathbb{R}^2$	.43	.56			
F	227.24***	191.52***			

\*p<.05, \*\*p<.01, \*\*\* p<.000

Note. UES=Unemployment Stress, SI= Suicidal Ideation, TCAS=Threat cognitive appraisal style,

B= Unstandardized coefficients; LL = Lower limits; UL = Upper limit

In Table 13 mediation analysis of unemployment stress and suicidal ideation by threat cognitive appraisal was computed. Results reveal that Threat cognitive appraisal plays a mediating role between unemployment stress and suicidal ideation among adults. The findings revealed that unemployment stress indirectly leads to suicidal ideation i.e. (B=.16) Threat cognitive appraisal style plays mediating role between both variables i.e. unemployment stress and suicidal ideation. However, the direct effect of threat cognitive appraisal is less than indirect effect which shows highly significant strong mediating factor of

threat cognitive appraisal  $R^2$ = .43 value shows the variation explained due to mediating variable i.e. threat cognitive appraisal style in unemployment stress and suicidal ideation.

## 4.8. Mediation Model

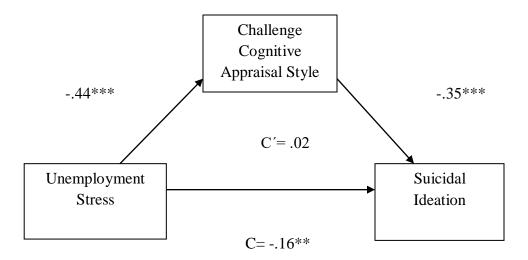


Figure 3

In Figure 3, -.44 value shows negative relationship between unemployment stress and challenge cognitive appraisal style, -.35 value shows the negative relationship between suicidal ideation and challenge cognitive appraisal style, C' shows direct effect whereas C shows indirect effect between unemployment stress and suicidal ideation.

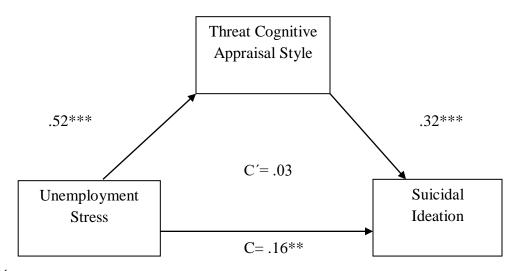


Figure 4

In Figure 4, .52 value shows positive relationship between unemployment stress and challenge cognitive appraisal style, -.32 value shows the positive relationship between suicidal ideation and challenge cognitive appraisal style, C' shows direct effect whereas C shows indirect effect between unemployment stress and suicidal ideation.

Means, SDs and t values based on Gender of Unemployment Stress, Suicidal Ideation, Challenge Cognitive Appraisal and Threat Cognitive Appraisal among Adults (N=300)

4.9. Table 14

	<u>Male</u>		<u>Fen</u>	<u>nale</u>						
	(n = 200)		(n = 100)		<u>95%CI</u>					
Variables	M	SD	M	SD	t	df	p	LL	UL	Cohen's d
UES	109.97	23.24	111.49	22.72	54	202.19	.59	-7.05	4.01	-
SI	32.10	7.42	32.51	6.90	48	211.38	.63	-2.13	4.50	-
CCAS	27.96	16.68	25.87	15.00	1.09	217.77	.27	-1.68	3.12	-
TCAS	60.02	18.88	62.27	17.01	-1.04	217.45	.30	-6.52	1.11	-

Note: UES = Unemployment Stress; SI = Suicidal Ideation; CCAS = Challenge Cognitive Appraisal Style; TCAS = Threat Cognitive Appraisal Style

Table 14 shows the means differences based on gender. Values in the table reveal that no significant (p>.05) differences were observed on any of the variable i.e. unemployment stress, suicidal ideation, and cognitive appraisal across gender.

**4.10. Table 15**Means, SDs and t values based on Marital Status of Unemployment Stress, Suicidal Ideation,

Challenge Cognitive Appraisal and Threat Cognitive Appraisal among (N=300)

	Single		Mar	<u>ried</u>						
	(n =	192)	(n = 108)		<u>95%CI</u>					
Variables	M	SD	M	SD	T	df	p	LL	UL	Cohen's d
UES	108.83	25.31	113.40	18.08	-1.81	281.41	.07	-9.53	.40	-
SI	31.26	7.93	33.97	5.44	-3.50	286.31	.00	-4.24	-1.19	.40
CCAS	28.60	17.51	24.88	13.12	2.08	271.38	.04	.20	7.24	.24
TCAS	58.65	20.10	64.53	13.81	-2.99	286.26	.00	-9.75	-2.01	.34

<sup>\*\*\*</sup>p<.001, \*p<.05

Note: UES = Unemployment Stress; SI = Suicidal Ideation; CCAS = Challenge Cognitive Appraisal Style; TCAS = Threat Cognitive Appraisal Style

Table 15 shows the means differences based on marital system. Values in the table reveal that no significant (p>.05) difference was observed on unemployment stress scale. Whereas suicidal ideation and cognitive appraisal had significant (p<.001, p<.01) differences across marital system.

**4.11. Table 16**Means, SDs and t values based on Family System of Unemployment Stress, Suicidal Ideation,

Challenge Cognitive Appraisal and Threat Cognitive Appraisal (N=300)

	<u>Joint</u>		Nuclear							
	(n = 169)		(n = 131)			<u>95%CI</u>				
Variables	M	SD	M	SD	t	df	p	LL	UL	Cohen's d
UES	110.41	21.23	110.56	25.27	05	252.67	.96	-5.55	5.27	-
SI	33.62	6.51	30.44	7.76	3.77	252.38	.00	1.52	4.84	.44
CCAS	25.63	14.50	29.37	17.89	-1.95	246.66	.05	-7.52	04	.23
TCAS	62.34	15.20	21.51	17.01	1.63	224.19	.11	77	7.96	-

<sup>\*\*\*</sup>p<.001, \*p<.05

Note: UES = Unemployment Stress; SI = Suicidal Ideation; CCAS = Challenge Cognitive Appraisal Style; TCAS = Threat Cognitive Appraisal Style

Table 16 depicts the mean differences based on family system. Values in the table reveal that no significant (p>.05) difference was observed on unemployment stress scale and threat appraisal style across family system. Whereas suicidal ideation and challenge cognitive appraisal style had significant (p<.001, p<.05) differences across family system.

**4.12. Table 17**Income-wise Comparison on Unemployment Stress, Suicidal Ideation, Challenge Cognitive Appraisal Style and Threat Cognitive Appraisal Style (N = 300)

	Low (N=54)		C		-			Mean			95% CI		
	M	SD	M	SD	M	SD	F	$\eta^2$	i-j	(i-j)	SE	LL	UL
UES	102.81	24.45	114.21	21.49	108.12	23.77	5.74**	.18	L <h< td=""><td>-5.31</td><td>3.97</td><td>-13.11</td><td>2.50</td></h<>	-5.31	3.97	-13.11	2.50
								.05	M < L	6.09	3.06	0.07	12.11
								.00	M < H	-11.40	3.56	-18.41	-4.39
SI	32.22	8.10	33.13	6.03	30.47	8.51	3.79*	.16	L <h< td=""><td>1.75</td><td>1.26</td><td>-0.72</td><td>4.22</td></h<>	1.75	1.26	-0.72	4.22
								.01	M < L	2.67	0.97	0.76	4.57
								.42	M < H	-0.91	1.13	-3.13	1.31
CCAS	31.63	20.51	23.93	11.82	30.96	18.81	8.00***	.81	L <h< td=""><td>0.67</td><td>2.76</td><td>-4.76</td><td>6.09</td></h<>	0.67	2.76	-4.76	6.09
								.00	M < L	-7.04	2.13	-11.22	-2.85
								.00	M < H	7.70	2.48	2.83	12.58
TCAS	55.56	20.59	64.28	13.78	57.25	22.69	7.01***	.59	L <h< td=""><td>-1.70</td><td>3.13</td><td>-7.86</td><td>4.47</td></h<>	-1.70	3.13	-7.86	4.47
								.00	M < L	7.03	2.42	2.27	11.79
								.00	M <h< td=""><td>-8.73</td><td>2.81</td><td>-14.27</td><td>-3.19</td></h<>	-8.73	2.81	-14.27	-3.19

\*p<.05, \*\*p<.01, \*\*p<.001

Note: UES = Unemployment Stress; SI = Suicidal Ideation; CCAS = Challenge Cognitive Appraisal Style; TCAS = Threat Cognitive Appraisal Style

Table 17 shows results of Analysis of Variance (ANOVA) in which three groups of income were measured. Between low, middle and high income groups, Post Hoc analysis computed concerning mean differences on unemployment stress, suicidal ideation, cognitive appraisal (i.e. challenge appraisal style and threat appraisal style). Results depict that between low and high income groups there is non significant difference in unemployment stress (p > .05) but between middle and low income groups, there is significant difference (p < .01). Whereas between middle and high income groups, there is highly significant difference (p < .001). Furthermore, between low and high income groups, there is non significant difference in suicidal ideation (p > .05) and between middle and low income groups, there is significant difference (p < .01) and between middle and high income groups, there is non significant difference reported (p > .05). Moreover, between low and high income groups, there is non significant difference on challenge appraisal style (p > .05), between middle and low income groups, there is highly significant difference (p < .001) and between middle and high income groups, there is also highly significant difference reported (p < .001). In the last, the results indicate that in threat cognitive appraisal style between low and high income groups, there is non significant difference (p > .05). Between middle and low income groups, there is highly significant difference (p < .001) and there is also highly significant difference between groups with middle and high incomes (p < .001).

# Chapter 5

# 5. SUMMARY, FINDINGS, DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

## **5.1. Summary**

The present study examines the relationship between unemployment stress, suicidal ideation and cognitive appraisal among adults. The study also aimed to examine the mediating role of cognitive appraisal style (i.e. challenge cognitive appraisal style and threatcognitive appraisal style) between unemployment stress and suicidal ideation. Different scales were used in the present study. Unemployment scale (UES) was developed and validated in the present research. Other two scales i.e. suicidal ideation attribution scale (SIDAS) and cognitive appraisal style (CAS) were already devised and validated by the researcher. The data was collected from purposive convenient sampling technique from post-graduates university students of different universities of Islamabad and Rawalpindi.

# **5.2.** Findings

The findings of the present study showed that there is positive relationship between unemployment stress and suicidal ideation. As in the literature, the present study found that challenge cognitive appraisal style decreases suicidal ideation unemployment stress whereas threat cognitive appraisal style increases suicidal ideation and unemployment stress. The findings of the cognitive appraisal style also show the significant mediation role between unemployment stress and suicidal ideation among unemployed people.

## 5.3. Discussion

The purpose of the main study was to investigate the effect of unemployment stress on

suicidal ideation in adults, as well as the effect of cognitive appraisal styles (i.e. challenge cognitive appraisal style and threat cognitive appraisal style). Additionally, the study examined how cognitive appraisal styles (challenge cognitive appraisal style and threat cognitive appraisal style) mediated the association between unemployment stress and suicidal ideation among adults. Comparing groups based on all study variables, including gender, income, family structure, and marital status was another goal of the main study.

5.3.1 Exploratory Factor Analysis and Item Total Correlation. Exploratory factor analysis (EFA) was run for Unemployment Stress Scale to estimate the factor structure of the scale. The minimum factor loading criteria was set to 0.3. Results revealed that all the commonalities were above the set criteria (i.e., .3). Only five items were deleted after principal component analysis which indicates that the factor structure will be disturbed and then we retained the remaining items of the measure to be developed. In the figure 1, the scree plot shows one dimension of construct in current context. So one factor solution was retained. Table 7 shows factor loadings, eigen value, percentage of variance explained and accumulative variance explained by one factor solution of unemployment stress scale. Therefore, unemployment stress scale (UESS) was taken as a unidimensional scale with 35 items measuring unemployment stress in Pakistan.

In table 8, Item total correlations were computed for 35 items. According to the data, there is a significant positive correlation between each item on the scale and its overall score. These results indicate that the scale is internally consistent evidencing the reliability of the scale.

**5.3.2. Relationship between Study Variables.** First hypothesis of the main study stated that there is a positive relationship between unemployment stress and suicidal ideation

among adults. The findings of the study (Table 9) supported this assumption by providing evidence that unemployment stress is positively correlated with suicidal ideation among adults. As per previous studies, Blakely suggests that the suicidal ideation and unemployment have association. The unemployed person suffering from stress are more likely having suicidal ideation (Blakely, 2003). In previous studies it is also suggested that higher unemployment stress would be associated with an increased risk of suicidal ideation (Glenn et al; 2018).

Second hypothesis of the study states that unemployment stress positively correlates with threat cognitive appraisal style. The results of the study (Table 9) fully supported this hypothesis and found that there is positive relationship between unemployment stress and threat appraisal style. As past cognitive theories suggested that negative attitudes have incorrect assumptions and lead to negative cognitive processing in stressful situations i.e. unemployment (Law & Tucker, 2018).

Third hypothesis of the study stated that unemployment stress negatively correlates challenge cognitive appraisal style among adults. Findings of the main study (Table 9) supported this assumption. In a previous study, the Jahoda's Deprivation Model (1933) reveals that people suffer from stress if their interpretation of the meaning of an event differs from global interpretation or meaning. Paul and Moser (2006) suggested the concept of inconsistency in thought patterns and negative appraisal as a theory to explain the psychological pain that people go through while unemployed. Vice versa if a person adopts positive appraisal style it automatically reduces the level of stress during unemployment. Positive attitudes of unemployment emphasize the privileges or positive elements of being

unemployed, however negative views of unemployment highlight the unpleasant experiences associated with being unemployed (Pignault & Houssemand, 2017).

Relatedly, fourth hypothesis of the study held that suicidal ideation negatively correlate with challenge cognitive appraisal style among adults. This hypothesis was fully supported by study results (Table 9), which showed that suicidal ideation strongly predicted challenge cognitive appraisal style among adults. Numerous studies can be used to support these findings. In previous researches generally meta-cognitive beliefs, specific positive and negative meta cognitive beliefs may be held about suicidal ideation (Bradvik & Berglund, 2011). Positive cognitive styles that is, high levels of subjective and psychological well-being has been shown to confer resilience against suicide ideation/behavior (Miranda et al., 2012).

In previous studies, Suicidal ideation is linked to distal risk factors like temperamental traits such as rigidity in cognition(Askenazy et al., 2003), cognitive factors (such as negative cognitive style) (Stange et al., 2015), and emotion regulation (Kwok & Shek, 2010) in addition to proximal risk factors like life events (Rew et al., 2016) and perceived stress (Cole et al., 2015). Research is increasingly indicating to the independent, positive impacts of positive cognitive style on physical functioning and mental health (Dockray & Steptoe, 2010; Garland et al., 2010; Koval et al., 2013). Studies have shown that low levels of positive cognitive style are more relevant than high levels of negative cognitive style in explaining hopelessness, which is 1.3 times more significant than depression for explaining suicide ideation (Beck et al., 1993; Bryan et al., 2013). Similarly previously in a prospective study of hospitalized adolescents, lower frequencies of positive affect were associated with shorter intervals in manifesting suicidal ideation, whereas negative appraisal style that was unrelated to manifesting suicidal ideation (Yen et al., 2013).

Fifth hypothesis of the study indicated that there is positive relationship between suicidal ideation and threat cognitive appraisal style among adults. Findings of the present study (Table 9) was confirmed and showed that suicidal ideation had a significant positive relationship with threat cognitive appraisal style among adults. Previous research had identified a number of cognitive vulnerabilities, including a number of negative attitudes and appraisals, as potential mechanisms underlying the development and maintenance of suicidal behaviour and ideation (Becker, 2010). Researchers also investigate at cognitive distortions and cognitive styles, and they have found a number of negative cognitive styles or distorted cognitions that are associated to a higher risk of suicidal thoughts and attempts. The degree of suicidal intention, or the individual's wish to bring about his or her own death, might influence suicidal thoughts and behavior (Hasley et al., 2008).

**5.3.3 Predictive Role of the Study Variables for Suicidal Ideation**. In order to explore the effects of unemployment stress and cognitive appraisal (i.e., challenge cognitive appraisal style and threat cognitive appraisal style) on suicidal ideations of adults and to test the study's hypothesis, linear and multiple regression analyses were computed.

Unemployment can influence mental health problems including stress. Adults are more prone to stress (McGee &Thompson 2015). A national study conducted in the United States utilizing data from the National Longitudinal Study of Youth found that the duration of unemployment during young adulthood was a predictor of greater levels of stress symptoms, which ultimately cause depression later in life (Mossakowski, 2009).

Sixth hypothesis of the main study stated that unemployment stress leads to suicidal ideation among adults. Results of the study (Table 10) showed that adult suicidal ideation

was positively predicted by unemployment stress, which provided evidence in support of this hypothesis. In the past studies of USA, researchers have found that a longer period of unemployment (measured as a continuous variable) was linked to more male suicidal ideation (Stack & Haas, 1984).

Seventh hypothesis of the main study stated that threat cognitive appraisal positively predict suicidal ideation among adults. Results of the study (Table 11) confirmed this assumption and found that threat cognitive appraisal style had a significant positive impact on suicidal ideation of adults. According to previous studies (Biggs et al., 2017), the way people react to stressful situations differs depending on how they interpret and assess the scenario. Previous findings have shown the significance of cognitive components like automatic thoughts. (Choon et al., 2015) and negative appraisal are linked with suicidal ideation and consequently lead to suicide thoughts and attempts (Rogers & Joiner, 2017). According to cognitive theories, maladaptive attitudes are inflexible supposition and lead to negative cognitive processing of stress situations (Law & Tucker, 2018). These results supported the current study's conclusions i.e. links between cognitive appraisal styles and suicide ideations (McGee & Thompson, 2015).

Eight hypothesis of the main study stated that threat cognitive appraisal positively decreases suicidal ideation among adults. Results of the Table 11 also revealed the same findings. Previous studies suggest that high levels of positive (challenge) cognitive style and low levels of negative (threat) cognitive style minimize suicide ideation (Beck et al., 1993; Bryan et al., 2013).

5.3.4. Mediating Role of Cognitive Appraisal. Process Macro was used to conduct mediation analyses (Hayes, 2013) in order to investigate the role of cognitive appraisal (i.e. challenge cognitive appraisal style and threat cognitive appraisal style) in the relationship between unemployment stress and suicidal ideation of adults (hypothesis 9). This is the second objective of the study. Process, which offers many of the features of the Sobel test and interaction term in a single command (Preacher & Hayes, 2008), is essentially a computational method for assessing path models, such as moderation, mediation, and their combinations (Preacher and Hayes, 2004).

Cognitive appraisal processes are crucial for understanding how humans adapt to stressful situations because how a person experiences stress and strain depends on how they assess a situation and their own coping mechanisms. Thus, understanding a person's actions and emotional states during a stressful event depends on two cognitive processes: primary cognitive appraisal, which entails determining the magnitude of the situation and assessing a person's ability to cope with stressors is part of secondary cognitive appraisal (Lazarus, 1991). Previous studies suggest that People affect differently from primary cognitive appraisal (such as perceptions of threat and challenge). For example, negative appraisal styles frequently correlates with negative outcomes which includes low coping expectancies and anxiety (Lazarus & Folkman, 1984; Sarason & Sarason, 1990; Skinner & Brewer, 1999), whereas challenge perception frequently correlates with favourable outcomes, such as satisfaction from successfully overcoming challenges and excitement over upcoming personal benefits (Lazarus & Folkman, 1984).

During the unemployment period, a person experiences about their unemployment status whether negative and positive feelings, depicts by the negative and positive thinking and appraisal styles (i.e., challenge cognitive appraisal style and threat cognitive appraisal style), respectively. These two competing opinions seem to be a reflection of thoughts about being unemployed that are continuous, rather than progressive (opposing periods of negative and positive appraisal styles). They are moderately linked with one another. Thus, this condition may be harmful to unemployed people who have negative appraisal styles but actually have positive appraisal regarding their unemployment (obtain the chance to engage in exceptions or think about potential career choices) (Pignault & Houssemand, 2017).

According to the hopelessness theory of suicide, negative cognitive styles increase risk for future suicidal thoughts and behavior indirectly by increasing hopelessness cognitions (Abramson et al., 1998). Similar findings have demonstrated that a lack of positive future expectancies (i.e. negative appraisal) is a better predictor of later suicidal ideation than hopelessness (O'Connor et al., 2008). In the United States, young adults between ages 18 and 29 are more likely than older adults to have suicidal thoughts (Arnett, 2000), plan suicides, and attempt suicides (Centers for Disease Control and Prevention, 2011). Previous evidence suggests that young people may think about and engage in suicidal behavior because they have difficulty generating solutions to problems (Dixon et al., 1994; Schotte &Clum, 1982, 1987). The inability to solve problems is considered to be an indicator of cognitive rigidity (Schotte & Clum, 1982). A 6-month follow-up study of people with a history of suicidal ideations and attempts has previously shown that ruminations and other negative thoughts are associated with cognitive rigidity (Davis & Nolen-Hoeksema, 2000) (Miranda et al., 2012).

The findings of table 12 revealed that challenge cognitive appraisal style negatively mediates between unemployment stress and suicidal ideation. It shows that if the individual

appraises positively in stressful situation (i.e. unemployment) it consequently decreases his/ her unemployment stress and suicidal ideation.

Furthermore, the results of table 13 revealed that threat cognitive appraisal style positively mediates between unemployment stress and suicidal ideation. It shows that if the individual have negative (threat) appraisal style in stressful situation (i.e. unemployment) it consequently increases his/her unemployment stress and suicidal ideation.

**5.3.5. Differences on Demographic Variables.** The study's last objective was to examine the comparison of the mean differences based on gender, family system, marital status, and income among the adults in the present study. By using t-test analysis, the gender, married status, and family system group differences on all the study variables were examined. Results indicated that influence of unemployment stress non- significantly higher among females as compared to males. Past studies revealed that males have more unemployment stress as compared to females (Taylor et al. 2008). Finding are not quite justified and in line with earlier studies. Gender socialization proponents assert that there are gender differences in how distress after major stressors, like unemployment, manifests (Chodorow 1978). Specifically, women's distress linked with unemployment will show as hidden mental health problems (Broidy & Agnew 1997, because women are taught to internalise their pain rather than display it through outward behavioural problems (Nolen, 2004). In contrast, other researchers have suggest that unemployment may produce lower levels of distress and thus fewer mental health problems for women as compared to men, because women may perceive unemployment as less seriously harmful to their status (Taylor et al. 2008). Whereas on challenge cognitive appraisal style, female adults scored low as compared to male adults. The findings are non-significant (Table 14).

The differences based on marital system revealed that married adults scored significantly higher on unemployment stress, suicidal ideation and threat cognitive appraisal style as compared to single adults. Whereas on challenge cognitive appraisal style, married adults scored significantly low as compared to single adults (Table 15). In previous studies emerging adults who married (24.6%) were not were more likely report being unemployment stress as compared with those who were married (12.8%) (Galambos et al., 2006). An Indian study found 24.6% and 7.1% of the adult population having Suicidal Ideation and Suicidal attempts (Kar, 2015) The prevalence of suicidal ideation, suicide attempt, and suicidality was 5.8%, 3.4%, and 8.3% respectively among married adults (WHO, 2020)

Another t-test was used to analyse group differences across all study variables based on family system (joint/nuclear). Results of the present study showed that joint family systems were much more affected by suicidal ideation and threat cognitive appraisal style than they were by unemployment stress and challenge cognitive appraisal style (Table 16). The results are not surprising because a joint family structure typically has a bigger family size, more family conflicts, high levels of stress, little opportunities for each family member to express and meet their own needs, and less quality time. These issues lead to unemployment stress and exacerbate adults' emotional or behavioral challenges (i.e., they get apprehensive, annoyed, withdraw, and begin to feel rejected) when a stressor is heightened. Marital quality may also be associated with cognitive limitations and have negative cognitive appraisal styles in part (as compared to unmarried people) by influencing psychological distress levels, exposure to stress, and health habits that are known to contribute to cognitive decline over time (Lee et al., 2010).

In table 17, to evaluate the differences in unemployment stress, suicidal ideation and cognitive appraisal (i.e. challenge cognitive appraisal style and threat cognitive appraisal style) among income groups, one-way analyses of variance were calculated. Between low, middle and high income groups, Post Hoc analysis was computed concerning mean differences in unemployment stress, suicidal ideation and cognitive appraisal (i.e. challenge cognitive appraisal style and threat cognitive appraisal style). Results shows that between low and high income groups there is non-significant difference in unemployment stress (p > .05) but significant difference between middle and low income groups (p < .01). This indicates that unemployment stress is higher in middle age and lower age groups. Between middle and high income groups, there is highly significant difference (p < .001) whereas there is non-significant difference on suicidal ideation between low and high income groups (p > .05) but significant difference between middle and low income groups (p < .01) and also non-significant difference between middle and high income groups (p > .05). Furthermore, in challenge cognitive appraisal style between low and high income groups, there is a nonsignificant difference (p > .05) but among middle and low income groups, there is highly significant difference (p < .001). Also in challenge cognitive appraisal style, between middle and high income groups, there is highly significant difference (p < .001). Lastly, the results indicate that in threat cognitive appraisal style between low and high income groups, there is non significant difference (p > .05) Between middle and low income groups, there is highly significant difference (p < .001) and there is also highly significant difference between groups with middle and high incomes (p < .001).

In cross-sectional studies, individuals with low socioeconomic status (SES), as determined by education and income level, have been reported to have significant levels of psychological stress (Cohen & Williamson, 1988). Additionally, it has been hypothesised that these individuals are more susceptible to high amounts of stress than high socioeconomic status groups (Aneshensel, 1992). As previous studies suggest that there was a high prevalence of suicidal ideation and suicidal acts among adults (Strandheim et al., 2014). Previous researches suggested that there were several factors, including family income and social factors, contribute to suicidal ideation. These include parents' divorce, unemployment, and environmental factors, such as financial difficulty, are among the most common causes of stress (Evan et al., 2004). It was found that suicidal ideation was linked with sociodemographic status (Kwok & Shek, 2008). Family interaction patterns could be negatively affected by low socioeconomic status, that is, low income, and could result in negative consequences for families. According to previous studies, adolescent suicidal ideation was significantly predicted by parents' educational level and their family income (Zeng, 1999). Previous research has shown that families with incomes below ten thousand experience higher rates of suicidal ideation in adolescents (5.5% compared to families earning more than ten thousand). The prevalence of suicidal ideation is also greater among adolescents from families with monthly incomes up to ten thousand (5.4%). Higher suicide ideation (27.3%) is observed among adolescents without homes compared to those with families. A higher number of young people who don't live with their parents have suicidal thoughts (8.2%) (Brent et al., 2009).

## 5.4. Conclusion

The present study found that experience of unemployment stress leads to higher level of threat cognitive appraisal style and ultimately causes suicidal ideation. As proposed, challenge cognitive appraisal style decreases the effect of unemployment stress and threat

cognitive appraisal style on suicidal ideation. As the person appraises his circumstances more positively during unemployment the less stress the person may feel and less suicidal ideation he may experience. Contrary to the assumption, the adult appraise negatively during unemployment have more stress and suicidal ideation among adults. The present study also shows that unemployment stress and threat cognitive appraisal leads to suicidal ideation and challenge cognitive appraisal decreases suicidal ideation. Significant group differences for research variables on the family system, marital system and family income were also shown in the study. But non-significant group differences among gender.

## 5.5. Implications

The study makes implications based on both theoretical and practical considerations. The current study made a theoretical contribution to the indigenous literature by devising the scale i.e. Unemployment Stress Scale (UESS) to measure unemployment stress of adults. Previously, no proper scale was available to measure unemployment stress of adults so to fulfill this need the present study develop new scale. To close this gap, the UESS was established, with the goal of measuring broader range of unemployment stress that adults may experience during the period of unemployment and leads to worse consequences.

In Pakistani context, it is important to study unemployment stress of adults. Different environmental factors boost the stress level of an individual during the period of unemployment. So the present study also helpful to understand the stress level of the unemployed person and how it leads to suicidal ideation. In stressful situations, the style of cognitive appraisal (i.e. challenge or threat) increases or decreases the stress of unemployed people. Moreover, the study also examined the relationship of unemployment stress with suicidal ideation along with examining the mediating role of cognitive appraisal (i.e.

challenge cognitive appraisal style and threat cognitive appraisal style) between unemployment stress and suicidal ideation. These findings also added empirical information in the existing body of literature in the context of Pakistan.

On practical grounds, UESS is an indigenous measure which will help examining adults' stress levels during unemployment. Findings of the study may also help policy maker to gauge the gravity of unemployment and its detrimental consequences on people so may further guide them to revise economic policies and create ventures for employment for the people.

## **5.6. Limitations and Suggestions**

With potential implications, the present study also has some limitations. First of all longitudinal design would help understand the factors affecting unemployment stress. Cognitive appraisal plays a mediating role between unemployment stress and suicidal ideation in this study. However there may be many other factors i.e. depression, social support, mental health, perceived emotional intelligence etc which may act as a buffer between unemployment stress and suicidal ideation. So future researchers are advised to incorporate these factors in order to get a comprehensive understanding of the whole phenomena.

Education should not be only for the sake of job. People should take education to create a sense of civilization and for the betterment of society, so the individual can prevent suicidal ideation in the period of unemployment. Different organizations are working for the prevention of suicidal ideation in Pakistan. Umang Pakistan is recognized by World Health Organization (WHO) and provides a safe space to people where they can get access to

psychosocial support 24/7. Their policy is to help people through their highly competent team of clinical psychologists/ therapists with utmost confidentiality and anonymity. The rate of suicide is also high in Ghizer (district of Gilgit Baltistan), so different ngo's are working there for the prevention of suicidal ideation.

Moreover as the study computed exploratory factor analysis (EFA) for the unemployment stress scale (UESS) but confirmatory factor analysis (CFA) could not be computed. As further sample would be needed for this and due to lack of time the researcher could not gather. So the researcher will further collect data to compute CFA.

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## **APPENDIX A**

#### **Informed Consent**

Assalam O Alaikum,

Hope so you are fine.

I am student of M Phil Psychology of National University of Modern Languages and my research is related to unemployed people who are educated and looking for job. The data collects through this research will remain confidential. So you can feel free to participate in this research. If you are educated unemployed then please fill up this Survey Form.I will be very grateful if you could spare some time to fill in my survey.

I will be grateful for your participation.

Thanks.

#### **Demographic sheet**

Age:	
Gender:	
Education:	
Marital Status:	
No. of siblings:	
Birth order:	
Family income:	
Years of Unemployme	ent
Family system: Joint/	Separate

# APPENDIX B

# **Focus Group Guide**

## Focus Group Guide for Unemployed Adults

بے روزگاری کا کوئی تجربہ ہوا ہے آپ کو کبھی؟	1
آپ اپنے تجربے کے بارے میں کچھ بتائیں؟	2
بے روزگاری سے جڑے معاشی مسائل لوگوں پر کس طرح اثر انداز ہوتے ہیں؟	3
بے روزگاری کی وجہ سے کیا اور کیسے ذہنی و نفسیاتی مسائل پیدا ہوتے ہیں؟	4
بے روزگاری نے آپ کو ذہنی و نفسیاتی طور پر کیسے متاثر کیا؟	5
اس کی وجہ سے آپ کے جزبات اور معاشرتی معاملات کیسے متاثر ہوئے؟	6
بے روزگاری نے آپ کے خاندان اور دوست احباب کے ساتھ تعلقات کو کیسے متاثر کیا؟	7
کیا اس کی وجہ سے آپ کے مذہبی عقیدے اور سوچ بچار کے ا نداز پر کوئی اثرات ہوئے؟ کیسے اور کیا؟	8
ان کے علاوہ کوئی اثرات یا مسائل جو آپ بتانا چاہیں؟	9

#### **APPENDIX C**

### **Unemployment Stress Scale**

Below are some statements with which you may agree or disagree. Keeping in view your unemployment and using the 1-5 scale below, indicate your feeling as unemployed with each item by marking on the values

1 – Strongly Agree 2 – Agree 3 – Neither Agree nor Disagree 4 – Disagree 5 – Strongly Disagree

S.No	Items					
1	I feel insecure for my future.	1	2	3	4	5
2	I am losing my confidence to get job.	1	2	3	4	5
3	I feel upset.	1	2	3	4	5
4	I feel there is no chance of getting a job without reference.	1	2	3	4	5
5	It is hard to earn bread and butter for my family.	1	2	3	4	5
6	I don't like to talk to anyone.	1	2	3	4	5
7	I feel constant headache.	1	2	3	4	5
8	I think my education was wastage of time as it did not help in getting job.	1	2	3	4	5
9	I feel angry most of the time.	1	2	3	4	5
10	I feel that I am so unlucky.	1	2	3	4	5
11	I think I cannot do anything successfully in my life.	1	2	3	4	5
12	I feel like crying whenever I think about my unemployment.	1	2	3	4	5
13	I have started hating myself.	1	2	3	4	5
14	I feel guilty because I am unable to fulfill family's financial needs.	1	2	3	4	5
15	I feel disappointed about getting a job.	1	2	3	4	5
16	I feel that my unemployment is a punishment for something I have done wrong.	1	2	3	4	5
17	I feel ashamed when my family taunts me for being unemployed.	1	2	3	4	5
18	I think I am a total failure.	1	2	3	4	5
19	I should take drugs to relief my tensions.	1	2	3	4	5
20	I feel myself stressful most of the day.	1	2	3	4	5
21	I feel that I lack abilities required for a job.	1	2	3	4	5
22	I face difficulty to take a healthy sleep.	1	2	3	4	5
23	I get easily irritated over minor things.	1	2	3	4	5
24	I have no sources to get job.	1	2	3	4	5
25	I think getting job without money is difficult.	1	2	3	4	5
26	I feel myself useless.	1	2	3	4	5
27	I have lost interest in routine life activities.	1	2	3	4	5
28	I have limited my interaction with others.	1	2	3	4	5
29	I think that I can't be happy unless I get a job.	1	2	3	4	5
30	I feel my relatives don't like to talk to me.	1	2	3	4	5
31	I don't like to go anywhere.	1	2	3	4	5
32	I don't enjoy special occasions (i.e. Eid, weddings, etc).	1	2	3	4	5
33	I feel irritation to listen other's problem.	1	2	3	4	5
34	I feel jealousy from employed people.	1	2	3	4	5
35	I feel that I have lost my worth.	1	2	3	4	5

#### APPENDIX D

### **Suicidal Ideation Attribution Scale**

Below are five statements about how you feel in the past month. Please read each statement carefully and using the 0-10 scale below, indicate your feeling with each item by marking on the values if you ever feel this way. If you feel between the extreme cases of 0 & 10 you can mark according to that from 1-9 also.

S.No	Items	0	1	2	3	4	5	6	7	8	9	10
1	In the past month, how often have you had thoughts about suicide?	Never										Always
2	In the past month, how much control have you had over these thoughts?	No control										Full control
3	In the past month, how close have you come to making a suicide attempt?	Not close at all										Made an attempt
4	In the past month, to what extent have you felt tormented by thoughts about suicide?	Not at all										Extremely
5	In the past month, how much have thoughts about suicide interfered with your ability to carry out daily activities, such as work, household tasks or social activities?	Not at all										Extremely

#### **APPENDIX E**

### **Cognitive Appraisal Style Questionnaire**

Below are some statements about how you are feeling. Please read each statement carefully and using the 1-6 scale below, indicate your feeling with each item by marking on the values if you ever feel this way.

1 – Strongly Disagree 2 – Slightly Disagree 3 – Disagree

**4**- Agree **5**- Slightly Agree **6** - Strongly Agree

S.No	Items						
1	I tend to focus on the positive aspects of any situation.	1	2	3	4	5	6
2	I worry that I will say or do the wrong things.		2	3	4	5	6
3	I often think about what it would be like if I do very well.	1	2	3	4	5	6
4	I believe that most stressful situations contain the potential for positive benefits.	1	2	3	4	5	6
5	I worry about the kind of impression I make.	1	2	3	4	5	6
6	I am concerned that others will find fault with me.	1	2	3	4	5	6
7	Overall I expect that I will achieve success rather than experience failure.	1	2	3	4	5	6
8	In general I look forward to the rewards and benefits of success.	1	2	3	4	5	6
9	Sometimes I think that I am too concerned with what other people think of me.	1	2	3	4	5	6
10	I feel that difficulties are piling up so that I cannot overcome them.	1	2	3	4	5	6
11	I lack self confidence	1	2	3	4	5	6
12	A challenging situation motivates me to increase my efforts.		2	3	4	5	6
13	In general I anticipate being successful at my chosen pursuits, rather than expecting to fail.	1	2	3	4	5	6
14	I worry what other people will think of me even when I know that it doesn't make any difference.	1	2	3	4	5	6
15	I am concerned that others will not approve of me.	1	2	3	4	5	6
16	I look forward to opportunities to fully test the limits of my skills and abilities.	1	2	3	4	5	6
17	I worry about what other people may be thinking about me.	1	2	3	4	5	6
18	I feel like a failure.	1	2	3	4	5	6
19	I'm concerned that others will be disappointed in my performance.	1	2	3	4	5	6
20	I worry that I may not be able to achieve the grade I am aiming for.	1	2	3	4	5	6
21	I am looking forward to testing my knowledge, skills, and abilities.		2	3	4	5	6
22	I am focused on the positive benefits I will obtain from this situation		2	3	4	5	6
23	I am thinking about the consequences of performing poorly.		2	3	4	5	6
24	I'm concerned about my ability to perform under pressure.		2	3	4	5	6
25	I am looking forward to the rewards of success.		2	3	4	5	6
26	I am thinking about the consequences of performing well.		2	3	4	5	6