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EXPECTATION STRESS, CAREER  
ADAPTABILITY AND PSYCHOLOGICAL  
WELL-BEING AMONG POSTGRADUATE  
STUDENTS**

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# Relationship Between Academic Expectation Stress, Career Adaptability and Psychological Well-Being Among Postgraduate Students

## ABSTRACT

*Postgraduate students' psychological well-being is viewed as a component in having a meaningful, joyful, and productive academic experience. The purpose of this study was to determine quantitatively the factors affecting psychological well-being among postgraduate students. The current study aimed to explore the relationship of academic expectation stress, career adaptability and well-being among postgraduate students; the direct effect of three dimensions of academic expectation stress (self, parental, supervisor) and career adaptability on well-being. It also determined the strongest predictor of psychological well-being after controlling the demographic variables as well as identifying the mediating role of career adaptability among the relation of academic expectation stress and psychological well-being. The online questionnaire survey was followed in the present study to collect the data from 287 enrolled MS/PhD students. The academic expectation stress inventory (AESI), career adaptabilities scale (CAAS) and 42-items Ryff scale of Psychological well-being were administered to the respondents through an online survey. The result showed that dimensions of academic expectation stress (i.e. parents, teachers, self) and career adaptability were significantly associated with psychological well-being. It was further explored that self-expectation and career adaptability were strong predictors of psychological well-being. The Hayes process model demonstrated that career adaptability was significantly mediated the relation of teacher/supervisor and psychological well-being. Whereas, the other dimensions of academic expectation i.e. relation of parental and self-expectation with psychological well-being were not mediated by career adaptability.*

**Keywords:** *Academic Stress, Well-Being, Career Adaptability, Hayes Model*

## 1. Introduction

Through education, people acquire the knowledge and abilities they need to comprehend and succeed in today's increasingly competitive world. Attending university is becoming a major commitment for many young people (Chow, 2007). The current century requires versatile and flexible students, lavished with all the qualities, skills and traits to keep pace with the ever-changing world along with updated knowledge (Yasmeen et al., 2018).

Globally, the desire to pursue higher education is increasing constantly. The average growth of higher education enrolment in the mid-1990s was 5.9%. It is expected to expand by 594 million by 2040 internationally (Choudaha & Van Rest, 2018; UNESCO, 2015). While, in Pakistan; the percentage of higher education is about 8.96% in 2018 (UNESCO, UIS 2018). The reason for high enrolment is the current proportion of the youth population (1.2 billion) around the world in human history.

Although, the young generation is expected to perform well academically to meet the challenges of the current labour market and fulfilled their family expectations (Ansari & Stock, 2010). Hence, University provides a platform for youth to make choices and lifestyle practices (Colic Baric et al., 2003).

Furthermore, the current COVID-19 pandemic epidemic, which began in early 2020, is extremely stressful for people from all walks of life, particularly for students. It has had a substantial impact on higher education expansion in a variety of ways, including the loss of physical events and activities that are the essential requirements for graduates to complete their research, practical and fieldwork (Tesar, 2020; Mailizar, et al., 2020; Shehzad et al., 2020). This pandemic influenced plans, activities and expectations of students regarding their education which leads to frustration and negative affect on the psychological well-being of students all over the world.

Psychological well-being is an important phenomenon to study because it is considered to be an essential factor of the performance and academic life of a student. Until now, higher education research has concentrated on comprehending and strengthening psychological well-being and its indicators among undergraduate students (Chow, 2007; Ang et al., 2016; Xiang et al., 2017; Ma et al., 2018; Sangma, et al., 2018; Ali et al., 2019; Soler-Masó et al., 2020; Johnston & Cassidy, 2020; Poots & Cassidy, 2020). As a result postgraduate students' psychological well-being largely overlooked in relation with the academic expectation stress (AES) (McKenna et al., 2017; Roslen et al., 2017; Susanti & Supradaniati, 2018; Bordbar et al., 2011). Furthermore, in Pakistan one of the eastern societies, limited research had addressed psychological well-being (PWB) and its indicators (Suleman, 2018; Yasmin et al., 2015; Butt, 2010; Khalid et al.; 2019; Bukhari & Khanam, 2017; Yousafzai et al., 2009; Sohail, 2013).

One of the most common indicators that negatively affect the well-being is academic stress. The academic expectation stress (AES) is one of them. The existing literature is in agreement that AES has a complicated pattern (Nguyen, 2015). The three dimensions of AES, self-expectations, parental expectations and teachers' expectations have been examined either uni-dimensional (Poots & Cassidy, 2020; Johnston & Cassidy, 2020) or bi-dimensional; the expectation of self and expectation of others i.e. teachers/parents (Calaguas, 2013; Nguyen, 2015). Besides, the investigation of academic expectations with the PWB of students is relatively scarce. As a result, this study will attempt to fill the gap of literature regarding the study of separate three dimensions of AES with the PWB of postgraduate students. Owing the cultural influence on students, the expectations of parents and teachers exist throughout the life of students which can influence the personality and well-being of a person. So, it is important

to explore the effect of academic expectation stress on the psychological well-being of postgraduates.

Furthermore, study suggested that career adaptability is a personality disposition that can be influenced by social factors (Savickas, 2013). Career adaptability and wellbeing is well-entrenched in literature among adults (Maggiori et al, 2013; Cai et al., 2015; Douglass & Duffy, 2015; Cabras & Mondo, 2017). Students with poor parental, social support and stressed environment have hindered the development of resources of career adaptability (Ebenehi et al., 2016; Öztemel & Yıldız-Akyol, 2019) which has a significantly negative effect on the well-being of people (Rudolph et al., 2017). In the present study career adaptability took as a mediator as the resources of CA help the person to cope with stress to retain well-being.

To the best of the present researcher's knowledge, limited studies have identified the association between academic expectation stress, career adaptability, as well as mediating role of career adaptability among the academic expectation stress and psychological well-being of postgraduates. Hence, the present study helped us to understand the pathway of academic expectation stress and psychological well-being via resources of career adaptability.

## **2. Theoretical Framework**

The theoretical framework of the present study is built on the self-determination theory (SDT) (Ryan & Deci, 2016) and Savickas career construction approach (Savickas, 2013). This study explains PWB as a developmental outcome, resulting from the interaction of psycho-social factors. Self-determination theory indicates that the person is continually engaged in a significant relationship with the environment, as the theory assumes that three essential psychological needs (autonomy, competence, relatedness) are fundamental to optimal human functioning and well-being (Ryan & Deci, 2017; Ryan & Deci, 2000; Baumeister & Leary, 1995). The theory explores that the adaptability disposition of a person is strengthened when he/she can manage the stressful situation to propel their psychological needs.

Career construction theory (CCT) stated that successful career growth is seen as a continuing adaptation that benefits from the effective alignment of personal needs with societal expectations (e.g., norms for the preparation for, entrance into, participation within, or exit from various work roles) (Hirschi et al., 2015; Savickas, 2002, 2005; Savickas et al., 2009). CCT defined Career adaptability resources (self-regulation mechanisms) are the capacities of self-regulation that can be used by a person to overcome the unpredictable, challenging, and ill-defined problems created by developmental career tasks, work trauma and career transition

(Savickas & Porfeli, 2012; Kusyadi, 2020). Career adaptability has been linked to a range of human and contextual variables.

### **2.1. Psychological Wellbeing**

Well-being is the hallmark of healthy living, which determine the quality of life (Uysal et al, 2016), mental, physical and social health (Jahoda, 1958; Gyasi et al., 2019). Well-being is a multifaceted concept that embraces a variety of specific terms and definitions, such as subjective well-being, psychological well-being, as well as hedonic and eudaimonic well-being which are the two philosophical traditions of positive psychology. The hedonic (subjective) well-being refers to pleasure, comfort, and enjoyment (Diener, 1984, 2000, 2009, 2011, 2013), presence of positive emotions and absence of negative emotions (Watson, Clark, & Tellegen, 1988; Mc Culloch, 1991). Whereas, eudaimonic (psychological) well-being is multidimensional, and an ongoing process to achieve complex goals, personal growth and meaningful life (Ryan & Deci, 2001; Veenhoven, 2003).

Various studies associated psychological well-being with the realization of a person's true nature, potential characteristics, self-growth and significant existence (Diener, 2018; Schmidt & Hansson, 2018; Daraei, 2013; Bailey & Phillips, 2015). Ryff, et al. (1989) defined psychological well-being as relates to the extent to which individuals feels that their lives and activities are subject to meaningful control and addressed the self-report instrument to measure six dimensions of psychological well-being which are: *Self-acceptance*; relates to a realistic self-perception. *Personal growth*; refers to continually growing and evolving as an individual. *Autonomy*; relates to the capability to feel empowered and assurance. *Positive relation* is the ability to cultivate affection and empathy with others. *Environmental mastery* refers to the confidence and trust of an individual in their capacities to negotiate the environment. And *Purposeful life* defines to have a purpose in life and the awareness that one's life has value and meaning (Ryff, 1989).

In educational Psychology, Psychological well-being acquires a prominent place (Talukdar & Goswami, 2013) in explaining mental health issues, those have become increasingly common among students especially postgraduate students, who tackle many stressful situations in their academic lives as they experience various changes in their academia (Yang, 2010). Undoubtly, the hunt of a higher education demands not just strongly time commitment and effort but also needs the investment of massive amount of financial assets, ability to manage and be devoted to fulfilling the expectations. University adds more pressure and requires young people to take decision independently (Terenzini et al., 1982; Bean and Bradley, 1986; Kaufman and Creamer, 1991; Pike 1991) which can influence their well-being. For instance, Ryff and Keyes

(1995) explored a survey on psychological well-being and they discovered that education is one of all factors that had an association with the degree of psychological well-being. Therefore, significantly positive psychological well-being of the student is needed to maintain, which is crucial to propelling them and societies towards success (Moore et al., 2012).

Furthermore, research findings addressed that the students' psychological health is affected by the numbers of significant social and demographic predictors i. e positive relation, family support, age, marital status, economic status, learning environment and academic stress that influence the academic performance and general life (Talukdar, & Goswami, 2013; Hassan, 2016; Bukhari, & Khanam, 2017; Blaskova & McLellan, 2018; Selian, et al., 2020; 2019; Bordbar et al., 2011; Butt, 2010; Daraei, 2013; Tharani et al., 2017). Research has shown that a positive relation of the instructor has a significant effect on the psychological well-being of students (Nielsen et al., 2017). The support of the instructor, family, friends, parents and significant others assist students to cope with stressful events in their daily lives (Alarcon et al., 2011; Daraei, 2013; Nielsen, et al 2017; Begum, 2020; Amai, 2021). Instructor support (supervisor) is more effective for the postgraduate students who are living far away from their parents (Nielsen, et al 2017).

A growing literature has exhibited that numerous psychosocial factors influence students' psychological well-being both in positive and negative ways (Talukdar & Goswami, 2013; Roslyn et al, 2017; Nielsen et al., 2017; Idris et al., 2019; Begum, 2020).

Factors like academic expectation (Butt, 2010; Ma et al., 2018; Nguyen, 2015; Aihie & Ohanaka, 2019; Gál et al., 2021) cultural influence (Ang & Huan, 2006; McCarthy et al., 2012) affect the well-being of students. As, Çelik (2019) stated that the academic focus of the collectivistic cultural school system encourages young people to become focused with evaluation and competitive exams. High expectations are also held by loved ones, teachers, and relatives for an adolescent's academic success (Brus, 2006; Longfield et al., 2008; Luo et al., 2013). This expectation in collectivistic culture is persistent from youngsters to adults. However, in individualist cultures, individual variables are more prominence (such as personal success, self-compassion and self-esteem (Neff, 2011; Schmuck et al., 2000).

Furthermore, an extensive research body suggests that psychological well-being is linked with the ability to adopt adaptive coping strategies in academic contexts (Freire et al, 2016).

Conclusively, it is stated that extant literature addressed ample pieces of evidence in Western and Eastern cultures. There is indeed undeniable data regarding the investigation of students' psychological well-being more advanced in western cultures (Chow, 2007; Bailey & Phillips, 2015; Davids et al., 2017; Pidgeon et al., 2017; Schmidt & Hansson, 2018; Alharbi & Smith,



2018; Evans et al 2018; Cornwall et al, 2019; Sverdlik & Hall, 2020; Soler-Masó et al., 2020). Although certain research studies related to students' Psychological well-being in different eastern societies including India (Daraei, 2013; Talukdar & Goswami, 2013; Hasan, 2016;) Malaysia (Shafaei et al., 2018; Yasin & Dzulkifli, 2010; Roslen et al, 2017), Iran (Bordbar et al, 2012) and Indonesia (Yasin & Dzulkifli, 2010; Susanti & Supradaniati, 2018).

With limited data on Pakistan related well-being, however; some research studies had been conducted either on adult or adolescent populations like Suleman (2018) conducted on adults concerning occupational stress and Malik (2021) among undergraduate students. Furthermore, the finding of a research study on the adolescent population reported the negative effect of depression on psychological well-being (Yasmin et al., 2015). Other researches in Pakistan found the association of Psychological well-being with perfectionism (Butt, 2010), happiness (Khalid, et al; 2019), life satisfaction (Bukhari, & Khanam, 2017) and academic stress (Yousafzai et al, 2009; Sohail, 2013). Khalid et al. (2019) investigated that the overall well-being in Pakistan is low as compared to the western adolescent population.

## **2.2. Academic Expectation Stress**

Academic stress is the term used to describe the stressful situations that arise as a result of the numerous demands imposed on students, such as exams, quizzes, maintaining wellbeing and academic lives, competing with peers, and meeting one's own as well as parental and academic expectations (Sohail, 2013; Preoteasa, et al, 2016; Aihie, & Ohanaka, 2019). Among all the above sources of academic stress, one is academic expectation. AES is mental stress resulting from academic expectations of parents, teachers and self (Ang & Huan, 2006; Celik, 2019).

Stress was the most prevalent health issue that influenced academic success in undergraduate students (Dwyer & Cumming, 2001). Eweniyi (2009) stated that students are more stressed than the general population, although they frequently seek help. Expectations from parents and teachers, the volume of homework and assignments, and assessment practises are just a few of the factors that can lead to academic stress. Due to their own expectations as well as those of their parents, teachers, and others, students may experience academic stress (Ang et al., 2015). There is sufficient evidence regarding academic stress and its role in the well-being of students (Wong et al., 2005; Tangade et al., 2011; Sohail, 2013; Zhou et al., 2018; Aihie, & Ohanaka, 2019) While, construct academic expectation stress is emerging in a new era (Fawzy & Hamed, 2017). According to academic literature, parents typically set academic expectations for their children (Deb et al., 2015; Sangma et al., 2018) as well as students can also set their own expectations (Ramachandiran & Dhanapal, 2018) or have teachers set for them (Bedewy & Gabriel, 2015). Resultantly, AES arise when students' coping mechanisms cannot keep up with

all of these demands (Ang & Huan, 2006; Yamamoto & Holloway, 2010; Johnston & Cassidy, 2020).

As living in a collectivistic culture, the students are highly stressed to fulfil the expectations of their parents. Stress among students of collectivistic culture arises from internalized parental expectations (Gloria & Ho, 2003; Oishi & Sullivan, 2005; Saw et al., 2012; Tao & Hong, 2014). Furthermore, in terms of professional development and further education, the collectivistic educational and family system may be observed as both directive and restraining (Kelecioğlu & Bilge, 2009; Owen et al., 2011). Resultantly the independency of students in terms of job exploration, search, and choice is limited. Parents have a significant impact on their children's goal-setting and success (Luo et al., 2013). Students internalized the parental and significant others' expectation regarding their career that leads to increase adolescent–parent career congruence (Kelecioğlu & Bilge, 2009).

Previous research studies revealed that family and societal expectations are important determinants of the career and other life choices of adolescents. If the expectations of important people (i.e., parents, teachers) do not overlap with or are not met by the individuals, they can feel that they might lose their status and love (Ang & Huan, 2006; Kelecioğlu & Bilge, 2009). Moreover, adolescents who align their career choices with their parents' academic and career expectations might be perceived as “ideal” and agreeable adolescents (Celik, E., 2019).

Another source of expectation stress among students of collectivistic culture is the result of internalised parental expectations (Gloria & Ho, 2003; Oishi & Sullivan, 2005; Saw et al., 2012; Tao & Hong, 2014). The students who take decision independently and go against the path decided their parents' desire and expectations, the selfishness and guilt feeling persist, which prevents people from fully appreciating the paths, they have chosen and that influence their well-being negatively (Murphy-Shigetmatsu et al., 2012). Consequently, people who adhere to rigorous parental guidelines and high academic demands have reported feeling of “stressful” and “full of pressure” (Mishra, 2018).

Similarly, Essel & Owusu (2017) asserted that inappropriate parental expectations are a major source of stress for students. As literature highlighted those students who are enforced choice have stress as compared to their chosen field (Bedewy1 & Gabriele, 2015).

The literature mostly focuses on the academic expectation stress at college, school and undergraduate levels. Due to collectivistic culture, academic expectation stress is present at every stage of academia therefore the aim of the current article to investigate the academic expectation stress at the postgraduate level in Pakistan.

### **2.3. Career Adaptability**

A psychosocial construct called career adaptability includes preparation, abilities, and resources to navigate career tasks, occupational transitions, and unforeseen problems successfully. Savickas (2005) and Johnston (2016) identified four resources for adaptability: concern, control, curiosity, and confidence. Concern requires looking ahead and making plans for the future, whereas control emphasises the individual's responsibility to determine his future. Curiosity is the investigation of potential selves and varying roles, while confidence is the conviction that people can make decisions and work hard to accomplish their goals (Savickas & Porfeli, 2012). The CA is considered as a multidimensional construct, which reflects a sequence of psychological aspects, such as personality, strengths, motivation, behaviour, attitude and readiness, was designed to evaluate an individual's readiness for flourishing mastery of career tasks and ability to prepare and take part in various work roles (Hartung et al., 2008; Hlad'o et al., 2020). The advancement of adaptive skills in the young adulthood period contributes to effective negotiations (Armstrong et al., 2003) as this time is considered one of the most tense periods due to a high level of uncertainty and indecision (Kuwabara et al., 2007). These adaptive skills and resources are termed career adaptability (CA).

According to CCT, valuable professional growth is viewed as a constant process of adaptation that arises from the successful fusion of individual demands with societal expectations, such as norms for preparing for, entering into, alignment with expectations, involvement within, or exit from various professional roles (Hirschi et al., 2015; Savickas, 2002, 2005; Savickas et al., 2009). Supported with literature as statistically analysed among students that, parents, friends, and significant others' support have a positive role in developing career adapting skills (Ebenehi, et al., 2016; Ginevra, et al., 2015; Y. Guan et al., 2013, 2015; Han & Rojewski, 2015; Hui et al., 2018; Tian & Fan, 2014; Wang & Fu, 2015; Hlad'o et al., 2020; Öztemel, & Yıldız-Akyol, 2019).

Similarly, Duffy et al. (2015) discovered a link between academic happiness and the four components of career adaptability. These findings reveal that undergraduate students who feel more flexible had higher levels of academic satisfaction. These findings back with the long-held idea that young people's career development begins even before they participate in work tasks (Hartung et al., 2005; Savickas et al., 2009; Negru-Subtirica & Pop, 2016).

Career adaptability resources have been associated with numerous career-related outcomes, including university graduates' job search, self-efficacy, and employment status (Guan et al., 2013), undergraduate academic satisfaction (Duffy et al., 2015), career optimism (Tolentino, et al., 2014), self-esteem, hope, life satisfaction, and general well-being (Cai et al., 2015; Hirschi, 2009; Maggiori, et al., 2013; Ohme & Zacher, 2015; Santilli, et al., 2014)

As well Hirschi (2009) discovered that career adaptability predicted life happiness among youth, consistent with prior findings that all four aspects of career adaptability were associated with higher levels of life satisfaction both academic as well as general (Maggiori et al., 2013; Brown, et al., 2012; Rossier, et al., 2012). Regarding the role of societal beliefs in the advancement of career adaptability, Hardin et al. (2001) and Guan et al. (2016) explored that strong traditionality beliefs affect the career choices and self-exploration of person which leads to limit the one's career decision self- efficacy and they intended to follow the traditional rules that obstruct the career adaptability of person. However, Zhou et al, (2020) revealed that adolescents who received a moderate level of parental expectation, support and interference and a high level of parent-child congruence, leads to intrinsically motivated adolescence to explore their career directions and significantly positive impact on the career adaptability consistent with prior studies. (Leung et al., 2011; Meece et al., 2014; Sawitri & Creed, 2015; Sawitri et al., 2014, 2015), opposed to those students who have high parental expectations that lead to a negative impact on career adaptability.

Moreover, Ginevra et al, (2018) explored that career adaptability is positively linked with life satisfaction of adolescents through the mediating role of courage, and this result is consistent with the career construction model of adaptation (Savickas & Porfeli, 2012) and the findings of Rudolph et al. (2017) meta-analysis, indicating that career adaptability is a relevant resource for strengthening personal well-being.

From the above literature, it concluded that career adaptability is sufficiently studied across different populations and with different constructs. So the contribution of the current study unfolded the relation of academic expectation stress, career adaptability and psychological well-being of students.

### **3. Method**

**3.1. Participant:** participants were from Universities located in Islamabad. 310 postgraduate enrolled MS/Mphil and PhD students took part in the survey. The responses of 13 students were excluded in data cleaning. A 23% (66) respondents of the total sample were male and 77 % ( 221) were female. The majority of the respondents were MS/Mphil (88.2%) and the PhD students were less than half (11.8%) of the whole sample. The age of students ranges from 20-to 44.

**3.2. Procedure:** The quantitative correlational approach was followed to find out the relationship between Academic expectation stress, career adaptability and psychological well-being. Data was obtained from the respondents through online self-report

questionnaires due to the Covid-19 pandemic situation. Data collection was completed over two month period approximately. It took about 15 minutes to complete the questionnaire. Participants were requested to declare their willingness to participate by approving the questionnaire's agreement form before finishing the survey. It was entirely voluntarily participation.

The regression analysis was performed predicting the variables of the outcome variable. For mediation analysis, the Hayes process model was monitored to explore the mediating role of career adaptability among the relation of academic expectation stress and psychological well-being.

### **3.3.Instruments**

The instruments utilized in the present study were based on literature. The following instruments were used namely; Demographic information sheet, Academic expectation stress inventory, Career adaptabilities scale, and Ryff scale of psychological well-being. According to the literature review, all the instruments have good Cronbach alpha reliability i.e. above (0.8).

#### **3.3.1. Demographic Information Sheet**

A demographic information sheet has been created by the first author and employed to collect information about the background characteristics of the participants like age, gender, education level, parental education and occupation, monthly income, phase of the study, living status, students' employment status and socio-economic status dimensions of students.

#### **3.3.2. Academic Expectation Stress Inventory (AESI)**

Academic expectation stress inventory designed by Ang & Huan (2006). It contains nine items comprised of three subscales. These items measure the parental, teachers/supervisor and self as a source of academic expectation stress. The Cronbach's alphas range from .81 to .89 on this scale (Ang et al., 2009). It uses a five-point Likert scale with ordinal numbering ranging from never true (1) to almost always true (5). The highest score show the high expectation stress while the low score viewed the low academic expectation stress of respondents.

#### **3.3.3. Career Adapt-abilities Scale**

Career Adapt-abilities scale (CAAS) designed by Porfeli & Savickas (2012) is used to measure the strengths of respondents to adapt to the transition. The CAAS containing 24 items comprised four sub-scales which are concern, control, curiosity and confidence. The items of this scale are based on a 5-point Likert scale from 1 (not strong) to 5 (strongest). The highest score represents high career adaptability and vice versa. The reliability of this scale is 0.91 (Avram, Burtaverde, & Zanzfirescu, 2019).

### **3.3.4. Ryff's Psychological Well-Being Scale**

Ryff's psychological well-being scale developed by Carol Ryff (1989) measured the psychological well-being of respondents on six dimensions of the scale: Autonomy, Environmental Mastery, Personal Growth, Positive Relations, Purpose in life and Self-acceptance. All the questions are based on a 6-point Likert scale from 1 (strongly disagree) to 6 (strongly agree). The low score viewed the low psychological well-being of respondents and the high score represent the high level of psychological well-being. The Cronbach's alpha coefficients for the six scales range from 0.82 to 0.90 (Schmutte and Ryff, 1997)

### **3.3.5. Kuppuswamy's Socioeconomic Status Scale**

Kuppuswamy's Socioeconomic Status Scale was first established in 1976 by Kuppuswamy and includes index criteria such as education, occupation, and total income to assess respondents' SES. The scale was employed in this study to find the socio-economic status of students after collecting information regarding education, occupation and income of the head of the family.

## **4. Results**

**4.1. Descriptive Statistics;** the inferential statistics were used to draw a comparison among respondents' background variables and psychological well-being. As seen in table 1 The mean  $\pm$  SD value of Ph-D students ( $145.45 \pm 16.58$ ) is greater than MS ( $141.84 \pm 18.25$ ), Research phase ( $143.40 \pm 17.36$ ) is greater than course work ( $139.15 \pm 19.69$ ), day scholar ( $143.13 \pm 18.16$ ) is greater than hostelites ( $141.86 \pm 18.06$ ), employed ( $145.89 \pm 18.60$ ) high than unemployed ( $141.42 \pm 17.88$ ). The larger mean value in groups' revealed better well-being compared to another dimension of their group. The age range 40-45 has a greater mean  $\pm$  SD followed by 20-29 age range and then the respondents of age 30-39. The upper and upper-middle-class have been determined better well-being than the lower and upper-lower classes as shown in table 1.

. Table 1

**Background characteristics of the respondents with the outcome variable**

<b>Background characteristics</b>	<b>n</b>	<b>%</b>	<b>Mean</b>	<b>SD</b>	<b>t</b>	<b>F</b>	<b>p</b>
<b>Gender</b>					-1.09		0.27
<b>Male</b>	66	23	40.15	17.08			
<b>Female</b>	221	77	142.91	18.34			
<b>Program</b>					-1.09		0.27
<b>MS/MPhil</b>	253	88.2	141.84	18.25			
<b>PhD</b>	34	11.8	145.45	16.58			
<b>Phase of study</b>					-1.76		0.07
<b>Course work</b>	76	26.5	139.15	19.69			
<b>Research phase</b>	211	73.5	143.40	17.36			
<b>Status of living</b>					-0.56		0.57
<b>Hostelites</b>	193	67.2	141.86	18.06			
<b>Day scholars</b>	94	32.8	143.13	18.16			
<b>Employment status</b>					1.65		0.09
<b>Employed</b>	55	19.2	145.89	18.60			
<b>Unemployed</b>	232	80.8	141.42	17.88			
<b>Age</b>						1.41	0.2
<b>20-29</b>	271	94.4	142.45	18.14			
<b>30-39</b>	15	5.2	137.46	16.00			
<b>40-49</b>	1	0.3	166.00	18.07			
<b>Socio-economic status based on Kuppaswamy's SES scale</b>						2.25	0.27
<b>Upper class(26-29)</b>	89	31	143.40	19.54			
<b>Upper middle class(16-25)</b>	147	51.2	143.64	17.92			
<b>Lower middle class (11-15)</b>	46	16	136.17	14.66			
<b>Upper Lower class(5-10)</b>	5	1.7	138.20	16.20			
<b>Lower class (&gt;5)</b>	00						

**4.2. Correlational analysis:** A Pearson correlational analysis was performed to determine the association between the self, parental and supervisor/teacher expectation stress regarding academia, career-adaptability with outcome variable among postgraduate students. Results revealed as shown in table 2 that the self (-0.26\*\*), parental (-0.23\*\*), teacher/supervisor (-0.157\*\*) were significantly negatively correlated with psychological well-being shown that high academic expectations regarding academia negatively affected the psychological well-being among students. Career adaptability (0.237\*\*) positively and significantly correlated with the psychological well-being of postgraduate students. This means that students having high career adaptability would have better psychological well-being.

**Table 2**

**Relationship between the main study variables and psychological well-being**

<b>Main variables</b>	<b>r</b>	<b>p</b>
Academic expectation stress		
AES regarding Parents	-0.236	**
AES regarding Self	-0.260	**
AES regarding Teacher/Supervisor	-0.157	**
Overall score of Academic expectation stress	-0.279	**
Career Adapt-abilities	0.237	**

( $P^{***} < 0.001$ )



**4.3. Multiple regression analysis:** this analysis was performed predicting the three dimensions of academic expectation stress and career adaptability with psychological well-being after controlling demographic variables. The three-step hierarchical regression analyses sought to identify the finding of three models. As seen in Table 3, the results revealed that the 2<sup>nd</sup> and 3<sup>rd</sup> models were statistically significantly predicted the outcome variable while the 1<sup>st</sup> model was found insignificant. The model 1 having demographic variables explained the 3.7% variance in psychological well-being with the regression model:  $F=1.553$  ( $p>0.005$ ),  $R^2=0.037$ , Adjusted  $R^2=0.013$ .

The 2<sup>nd</sup> model explained the 11.6% variability in the outcome variable after including the academic expectation stress of self, parental and teacher/supervisor with the regression model:  $F=3.631$  ( $p<0.005$ ),  $R^2=0.116$ , Adjusted  $R^2=0.084$ ,  $R^2$  Change= $0.079$ . In the last model, career adaptability (mediator) was added to the regression analysis which explained an 18% variance in the psychological well-being among postgraduate students with regression model  $F=5.462$  ( $p<0.005$ ),  $R^2=0.179$ , Adjusted  $R^2=0.146$ ,  $R^2$  Change= $0$ .

Variables	Step 1			Step 2			Step 3		
	B	SE	$\beta$	B	SE	$\beta$	B	SE	$\beta$
(Constant)	133.57	16.74		161.33	17.13		143.79	16.97	
<b>Background characteristics</b>									
gender	2.056	2.818	0.048	1.736	2.743	0.040	3.144	2.666	0.073
Age	0.165	0.526	0.022	0.042	0.514	0.005	-0.109	0.497	-0.014
enrolled program	4.012	3.559	0.072	4.225	3.431	0.076	3.055	3.322	0.055
phase of study	3.467	2.499	0.085	3.399	2.409	0.083	2.435	2.335	0.060
status of living	1.263	2.315	0.033	0.391	2.239	0.010	-0.135	2.164	-0.003
status of employment	-3.839	2.818	-0.084	-3.234	2.721	-0.071	-3.095	2.627	-0.068
SES	-2.318	1.569	-0.093	-2.633	1.515	-.106	-2.232	1.465	-0.090
<b>Main variables</b>									
Sum-self				-1.049	0.360	-0.197*	-1.125	0.348	-0.212*
Sum-parental				-0.580	0.414	-0.105	-0.543	0.400	-0.099
Sum-T/S				-0.244	0.569	-0.029	-0.480	0.552	-0.057
CAAS							0.257	0.056	0.261*

**Table 3**

**Step 1:** F=1.553 (p>0.005), R2= 0.037, Adjusted R2=0.013, R2 Change=0.037

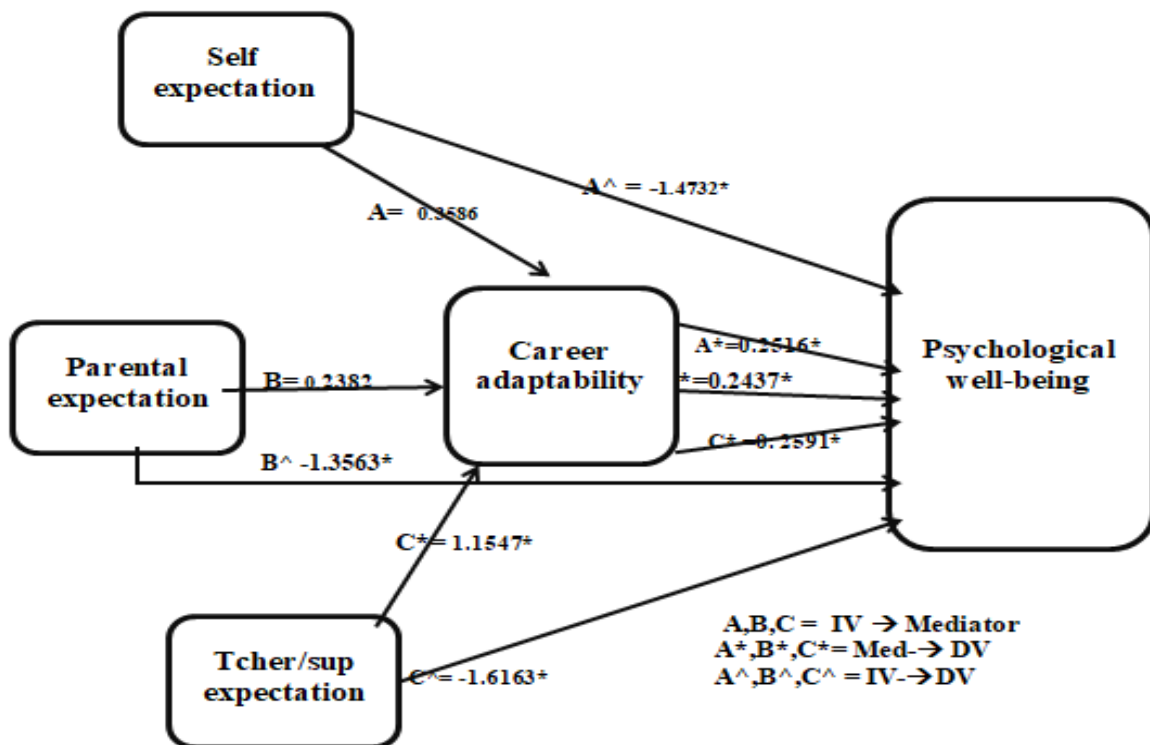
**Step 2:** F= 3.631(p<0.005), R2=0.116, Adjusted R2=0.084, R2 Change=0.079,

**Step 3:** F=5.462(p<0.005), R2=0.179, Adjusted R2=0.146, R2 Change=0.063

**4.4. Mediation analysis:** The Hayes process model has been followed to investigate the mediating role of career adaptability among the relation of dimensions of academic expectation stress and psychological well-being among postgraduates. As seen the results in table 4 and figure 1 the mediation effect are wondering, proposed that career adaptability only mediated the relationship between teacher/supervisor academic expectation stress and psychological well-being. It did not significantly mediate the associations between other dimensions of academic expectation (i.e. self-academic expectation and parental expectation stress) and psychological well-being

*Figure 1*

*Mediation Analysis of Career Adaptability Among Dimensions of Academic Expectation Stress and Psychological Well-Being of Postgraduates*



**Table 4**

<b>Indirect effect</b>	<b>BootLLCI</b>	<b>BootULCI</b>
<b>Self-academic expectation stress</b>	-0.0686	0.3224
<b>Parental academic expectation stress</b>	-0.1157	0.2588
<b>Tcher/sup. academic expectation stress</b>	0.0214	0.6801

## 5. Discussion

Our study sought to demonstrate the relation between academic expectation stress, career adaptability and psychological well-being among postgraduate students. Regression analysis and Hayes process model was followed to investigate the hypotheses. The result of Pearson correlational analysis confirmed that dimensions of academic expectation stress and career adaptability were significantly associated with psychological well-being among postgraduates students. The results of hypothesis (negative association among academic expectation stress and psychological well-being) consistent with the prior empirical findings reported that experiencing unrealistic academic expectation leads to develop stress that negatively affects the psychological well-being (Ang & Huan, 2006; Gloria & Ho, 2003; Oishi & Sullivan, 2005; Saw, Berenbaum & Okazaki, 2012; Tao & Hong, 2014; Lashari et al., 2013; Ortlieb, E., 2015; Yamamoto & Holloway, 2010; Shankar & Park, 2016; Johnston & Cassidy, 2020). The findings also supported by self-determination theory. The theory assists in understanding the role of academic expectation of parents, teacher and self as a social context help in developing autonomous motivation or controlled motivation which thwarts or satisfy the basic psychological needs to ensure the psychological well-being of students (Creed et al., 2007; Hirschi, 2009).

The hypothesis (positive association between career adaptability and psychological well-being) was supported and corroborated with career construction theory (Savakis, 1989) and previous findings of research studies that career adaptability has been linked to career optimism, self-esteem, hope, life satisfaction, and general well-being (Cai et al., 2015; Douglass & Duffy, 2015; Hirschi, 2009; Maggiori, et al., 2013; Ohme & Zacher, 2015; Santilli, et al., 2014). Johnston and colleagues (2015) found in their longitudinal study that career adaptability was positively associated with life satisfaction. Similarly in another longitudinal research study, findings revealed that adaptability helps the person to higher positive affect and diminished

negative effect. (Fiori et al., 2015). Next to investigate the strongest predictor of psychological well-being after controlling demographic variables was analysed through multiple regression analysis. The three-step regression analysis model was administered to analyse the results of the proposed hypothesis. The result supports the hypothesis that self-expectation and career adaptability was the strongest predictor of psychological well-being. The parental and teacher/supervisor was found non-significant. Result substantially aligned with the previous findings (Neff, 2011; Schmuck et al., 2000; Zhou et al., 2020). An early study conducted on Filipino students that determined there has been no idea of the other in the other person among Filipinos especially, and the other one was also one's self (de Leon, 2007) as well as the expectations of others would be congruent with one's expectations. Expectations were seen as significant among Asians, regardless of who set them, by themselves or with the help of a significant other. Similarly The association of career adaptability and well-being is supported with literature as evident that career adaptability has been linked to career optimism, self-esteem, hope, life satisfaction, and general well-being (Cai et al., 2015; Douglass & Duffy, 2015; Hirschi, 2009; Maggiori et al., 2013; Ohme & Zacher, 2015; Santilli et al., 2014).

Finally, the study explored the mediating role of career adaptability among the relation of dimensions of academic expectation stress and psychological well-being through Hayes process model. The current study bootstrap values revealed only the mediation happened between the relation of supervisor/teacher and psychological well-being align with earlier study that a positive instructor-student relationship has a major impact on students' coping abilities that retain psychological well-being (Nielsen, et al 2017). The hypothesis supported with several prior studies that explored support relates to coping, subjective well-being, and academic performance is mediated by a sense of control (Cao & Zeng, 2008; Ross & Broh, 2000; Valentiner, Holahan, & Moss, 1994).

Numerous empirical studies have found that the fit between supervisor and supervisee has a significant impact on postgraduates' emotions (Chiang, 2003; Cotterall, 2013; Gearity & Mertz, 2012; Lin, 2012; McAlpine & McKinnon, 2013) and academic persistence (Golde, 2005; Gube et al., 2017; Ives & Rowley, 2005; Leijen et al., 2016; Litalien & Guay, 2015; Lovitts, 2008; Pauley et al., 1999). This exhibit that students at the postgraduate level having warm and supportive relationships with instructors will help them to adapt to the transition in their life and retain their well-being.

## **6. Limitations and Suggestions for Future Studies**

The findings of the current study are not free of limitations. Several limitations are existing in the current research and suggestions are provided for upcoming researchers.

The online medium was followed due to the worst situation Covid-19 pandemic and students were mostly limited to their comfort zone. However, it is recommended that future research studies should investigate postgraduate students physically. Because no one can predict whether they filled online forms with interest or not.

Due to online survey, the data collected from sample was unequal regarding demographic variables i.e. gender, program, status of living, employment status which effect the result of current study. Future researchers should take care regarding this imbalance situation.

The present study is limited to postgraduate students who enrolled in MS and PhD. It is also proposed to future research should examine whether the findings of the current study will be generalized to other populations like the final year students of the undergraduate program and final year of 2-years master program students. .

Another potential limitation in the current study is that the regression analysis model just explained an 18% variance in psychological well-being. The remaining variability will cause by other variables. Future studies should investigate that which factors will contribute along the studied variables can determine better understanding the variance in the psychological well-being among postgraduate students.

Although, the present study clarified up to some extent the mediating role of CA among the relation of dimensions of academic expectation stress and psychological well-being. It is recommended for upcoming research to investigate the four dimensions of career adaptability role separately in this relation and also investigate others mediators or moderators to extend the study.

The demographic factors in the current study show non-significant relation with psychological well-being. It is recommended for future studies to identify other factors that are strongly associated with the students' PWB.

The suggestion for future research to use the mix method to extend the generalizability and quality of research.

## **7. Conclusion**

The present study investigated the association of AES (self, parental, teacher/supervisor), CA and PWB among postgraduate students. Furthermore, the current study determined the predictive role of AES and CA on PWB after controlling the demographic variables. Next, the

study found the mediating role of CA among the relation of academic expectation stress dimensions and psychological well-being of postgraduate students.

The regression analysis revealed that after controlling the demographic variables, academic expectation stress and career adaptability were significantly predict psychological well-being. Among the three dimensions of academic expectation stress, the self-expectation was found to significantly negatively predict psychological well-being while the other two dimensions were non-significant predictors of psychological well-being. Regarding mediation analysis, results from bootstrapping propose that CA only fully mediated the relationship between teacher/supervisor AES and psychological well-being. It did not significantly mediate in the associations between other dimensions of academic expectation (i.e. self-academic expectation and parental expectation stress) and PWB.

The findings of the current study were aligned with previous studies and support the theoretical framework in the different conceptual frameworks. Resultant Academic stress is above average, which is deemed a risk factor, whereas career adaptability is a buffering element of psychological well-being among students, according to the current study

## Disclosure

No potential conflict of interest was reported by the author.

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