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The Psychological Consequences of Career Indecision: A Longitudinal Analysis of Vocational Identity and Mental Health among Professionals

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Abstract

The present study was conducted to study impact of career indecision, vocational identity on mental health of professionals in Pakistan. Purposive sampling technique was used based on cross-sectional design. Sample comprised 400 professionals (100=engineering, 100= medical, 100= teaching and 100= banking professionals) were taken from different private and government origination and institutes of Haripur, Rawalpindi, Taxila and Islamabad. Age ranged from 22 to 30. Three scales were employed to career indecision, vocational identity and mental health. The results had shown that there is negative relationship between career indecision and mental health and vocational identity. The results also revealed that there is positive relationship between vocational identity and mental health. The results further showed that female professionals have more career barriers, career decision making difficulties and more mental health problems as compared to male professionals. Vocational identity was non-significant between male and female professionals. The result of current study showed that among engineering, medical, teaching and banking professionals; medical professionals were high on vocational identity, teachers were high on career decision making difficulties and Engineers were high on mental health as compare to bankers. Further analysis revealed that career indecision is statistically significantly negatively predicting mental health in engineering and Banking professionals. Vocational identity is statistically significant positively predicting mental health in engineering, medical, teaching and banking professionals. It would be help for pedagogical and clinical setting to reduce career decision making problems of students.

Keywords: Career Indecision, Vocational identity, Career Barriers, Mental Health.

INTRODUCTION

The most important and difficult decision is related to selection of occupation or college major, which affects most, if not all, individuals. Because career related decision is crucial in every one's life and it also measures individual's self-identity in society and a number of studies have been conducted on issue of career decision status Gottfredson, Gottfredson, Payne, & Gottfredson, 2005).

According to Jones and Chenery,(1980), career decision status or decidedness about career is defined as a variable that continue ranging from one's self perception of completely career decided to completely career undecided. Career decidedness lies on one end of spectrum while

other spectrum includes career indecision and is defined as “lack of ability to make career decisions accordingly to one’s own interest” (Guay, Senécal, Gauthier, & Fernet, 2003). The main reason for career indecision is often described as “lack of information” and defined as one’s lack of ability to choose occupation or major at university level or often viewed as general lack of effective decision making skills related to career (Chartrand, Rose, Elliott, Marmarosh, & Caldwell, 1993).

The most important time in an individual’s life is when they are going to make important decision regarding their life. They are responsible to make important decision during almost all phases of life. Creed, Patton, & Prideaux, 2006; Hartung, Porfeli, & Vondracek, 2005). Some of the decisions in an individual’s life are of great concern due to their impact in future life and some of the decisions are easy to make. For example; decision related to one’s career (Gati, Krausz, & Osipow, 1996). At certain stage of life everyone make career related decisions which further determine their future job.

If an individual fails to make desired career related decision and remains confused about their chosen career, it can be said that, they are facing career indecision (Kuzgun, 2006). Therefore, researches in career psychology focus on the difficulties which hinder correct career decision making of individuals and how an individual determine, handle and understands his/her career decision process’s dynamics (Germeijs & De Boeck, 2002)

Decision making is crucial to daily life. Individuals are required to make important decisions in their life related to career selection, occupation, educational institute selection etc. Decision making process is an action which is purposive, moral and dynamic and resultant to problem solving (Shafi Abadi, 2002). Due to importance of career decision making, it is not surprising that most of the career psychology researches focus on understanding career decision making process (Brown & Rector, 2008).

An individual faces a lot of problems when he/she lacks ability to make proper and right career decision ((Tiedeman & O'Hara, 1963). According to them, it is important for every individual to develop abilities and skills for decision making and to learn about career decision making process because it is important to make right career decision according to one’s personal, social, economic and political factors. Decision making regarding to career is a complex process. In the previous literature, career indecision is used to indicate problems during the process of career decision making and there are different forms of career indecision that were highlighted in prior studies (Crites, 1969; Tyler, 1969). It is a developmental process which students experience during their process of career decision making (Guay, Ratelle, Senécal, Larose, & Deschênes, 2006; Talib & Aun, 2009). Career indecision is viewed as difficulties during career decision making process and inability to make one choice for career from different options (Gati & Saka, 2001)

Our modern society encourages individuals to choose perfect and correct career having bright future, for job and if individuals fail to choose best career, having limited job opportunities, they blame themselves for their incorrect career choice. Young adults are responsible for career decision making, and they invest their effort in an inclusive search of all career alternatives.

They may adopt specific beliefs and standard about their career decision making process and career alternatives. Prior studies stated that, it is important for university graduate to choose best job related to their career, if one gets failed to find appropriate job, it is presumed that his/her career is ruined (Jones & Chenery, 1980).

OBJECTIVES

1. To study relationship between career indecision, vocational identity and their impact on mental health of professionals.
2. To identify difference among four major professions (teaching, banking, engineering and medicine) on career indecision, vocational identity and mental health.

RESEARCH QUESTIONS

1. What is the relationship between career indecision, vocational identity, and their impact on the mental health of professionals?
2. How do the four major professions (teaching, banking, engineering, and medicine) differ in terms of career indecision, vocational identity, and mental health?

RATIONAL OF THE STUDY

Career direction is a crucial concern for students in Asian countries, including Pakistan, where societal, parental, and environmental influences shape their career choices (Abbasi & Sarwat, 2014). Many students opt for high-demand fields like medical sciences, business, engineering, and agriculture due to job opportunities and financial stability. However, research on career indecision remains limited in Pakistan. Higher education institutions struggle to meet the needs of the growing youth population, leading to increased unemployment rates and career-related stress. Students often lack proper career guidance, resulting in academic failures, psychological distress, and workplace dissatisfaction.

The study aims to explore career decision-making difficulties, vocational identity, and career barriers among Pakistani professionals, focusing on business, engineering, medicine, and teaching. It will also examine gender-based career influences and psychological challenges linked to career indecision. Career-related anxiety impacts academic and professional success, making it essential for educational institutions to provide career counseling. Addressing these concerns can help students make informed career choices, enhancing their job satisfaction, mental well-being, and overall life adjustment.

REVIEW OF LITERATURE

CAREER INDECISION

At first, career indecision was defined as lack of ability of a person to select a specific profession/occupation for future. On the basis of commitment to future occupation, individuals were perceived as decided or undecided (Ashby, Wall, & Osipow, 1966). Among university students, career indecision was viewed as inability to choose university major or specific occupation (Borgen & Hiebert, 2006). One of the most important decisions for individuals in life is to choose career for themselves, which may have an influence on their life and also have an effect on course of their life (Gati, 1998; Hall & Chandler, 2005; Lock, 2009)

In the transition period, adolescent faced career decision making problems, when they shifted to tertiary institution from high school. When adolescents and young adults are expected to choose appropriate career for them, they may experience high level of stress and this period may be overwhelming. Consequently it causes effect on quality of career choice. Among undergraduate university students career indecision is defined as incapability to choose a university major or occupation (Borgen & Hiebert, 2006). For many decades, the number of studies on career indecision has extensively increased.

According to Osipow (1999), originally career indecision focused on the problems which students faced while deciding for their career path. In the more recent years, however, career indecision has developed and includes broad life spectrum problems due to which some individuals need to amend their career plans according to their circumstances which force them to adjustment problems in practical life.

Lock (2009), proposed that in the earlier time, usually students would choose a single career and for many years they would remain consistent on their career path. In that time period, ecological changes were not considered as important for example instability of economic conditions, recessions and global competition, which are important reasons that make organizations to reorganize and restructure and make some basic changes (Reitman & Schneer, 2003) Additionally, over the years, career decision making circumstances for students and professionals have also changed.

According to Lock, (2009), when these changes i.e. world of work and economic condition of state require students to adapt it, it may eventually resultant in instability and uncertainty for career choice. Additionally, to the above problems, after the completion of education when some students decide to seek employment, they may face high rate of unemployment and lack of skills for labor market (Lock, 2009). And some students after school pursue for higher education and due to uncertainty and career indecision they may switch from one career to another major career. ` Majority of newcomers into labor market follow a career where they would base their career choice on necessity of time and may be, undecided about different careers in labor market which cause career indecision (Hall & Chandler, 2005). According to Mbware (2004), employed parent's children have more career aspiration as compared to unemployed parents. In the developmental stage, as children grow and develop, they may start to idealize those careers which they found more appealing. Career decision making is explained by different modals which either present description about career decision making process or provide various guidelines for career decision making (Phillips & Jome, 2005). Theories about developmental career decision making stated that process of career decision making starts at primary school level and students learn to develop and identify their interest and abilities and how to relate them with the real work world. Creed et al., (2006) said that this process continues throughout the lifespan of an individual. Career indecision may be different in different situational factors and is a normal developmental process (Osipow, 1999). Career guidance helps individuals to choose appropriate career in future for them and to fulfill other expectations of life (Osipow, 1987; Sharf, 2016; Stead & Watson, 1999).

CAREER CHOICE AND DEVELOPMENTAL THEORIES

Career choice theories are associated to a three-way classification of personality theories, namely; trait, structural, and adjustment (Hewer, 1963). Developmental aspects of career choice included all the important dimension of the choice decision making process. These theories help in making sense of one's experiences about career. These theories would allow individuals to understand their past and predict the future for career choice (Van Reenen, 2010). Career developmental theories provide people with "career guidance" to make them more informed about career decisions making process. Following are the brief major career developmental theories.

HOLLAND'S CAREER TYPOLOGY THEORY

Holland's Career Typology Theory has guided "career interest assessment" and is well known for the "person– environment" fit theories. Holland's theory was well-known to assist understanding of career interest and environment, which is important for career counseling and guidance (Porfeli & Skorikov, 2010). An interaction between a personal trait of individual and broader environment has been emphasized by vocational psychology. "Vocational Guidance suggests career that a process guided decision making called True Reasoning in which one select a career for him/her self-amongst on the basis of association to their interests and abilities amongst alternatives in their environment" (Parsons, 1909).

SUPER'S THEORY OF CAREER DEVELOPMENT

Most developmental stage theories proposed that according to chronological age, irreversible changes of an individual life follow one another in a rigid sequence (Corkin et al., 2008) According to Tien (2005), Super's theory of career development concentrated on the changes which an individual experiences as they get mature. Super's model is one of the model among various career developmental theories which is different. It suggested that the stages have no invariant relationship to chronological age and psychological changes do not necessarily remain permanent, when an individual successfully pass through a particular stage (Smart & Peterson, 1997). Table on the following page represents the career development stages, age and characteristics of Supper's model.

SUPER'S FIVE LIFE AND DEVELOPMENT STAGES

Super proposed that socio economic factors, mental and physical abilities of individuals, personal characteristics of him/her-self and the opportunities in future to which individuals are exposed are the determinants of career choice patterns (V. G. Zunker, 2002). Super introduced an important notion of "Self Concept" in career development. According to Tien (2005), self-concept of individual changes and develops throughout life because of different life experience of individuals. Moreover "the Vocational Self-Concept " of individuals develop through one's physical and mental growth, observations of work place, identification with employees, general environment of world of work, and one's general experience (V. G. Zunker, 2002)

Stage	Age	Characteristic
Growth	0-14	Development of self-concept, attitudes and

		general world of work.
Exploration	15-24	Tentative choice and skill development
Establishment	25-44	Entry level skill building and stabilizing through work
Maintenance	45-64	Adjustment process to improve position
Decline	65+	Reduced output and retirement.

Source: Zunker (2001 cited in Van Reenen, 2010).

VOCATIONAL/PROFESSIONAL IDENTITY

According to Holland et al., (1980), vocational/professional identity was described as possession of an apparent and constant picture of an individual's goals, interests, personality, and abilities". Holland et al., (1980), stated that for the development of mature career behaviors to set career goals, exploration of careers and for making decisions related to career, formation of vocation identity is very important. The people who have strong sense of vocational identity, they are more able to make career related decisions according to environment taking account into uncertainties and ambiguities. On other hand, people who have poor sense of vocational identity, they may have difficulty in decision related to career choices.

According to Holland et al., (1980); Savickas, (1985), when an individual is confused about his/her vocational identity, it lead them undesirable or dysfunctional thoughts related to career and behaviors related to career decision making e.g., lack of ability of to make career choice . Holland and associates in (1980) conducted a study to support this assumption. They conducted a research on the association between vocational identity of an individual and their career indecision problems. The results supported the assumption that an individual who have stronger sense of vocational identity, they are more capable in career decision making. This research further confirmed the implication of vocational identity in the development of career decision making of adolescents.

Erikson (1968), defined identity as "the formation of understanding, that an individual has a sense of personal control, consistency, coherence, few will and agreement among standards, beliefs, and commitment". Erikson explained that, formation of occupational identity is the integral part of identity formation, which indicates one's values, standards and beliefs to occupation and assist individual to figure out commitment to career, employment and occupation.

According to career researcher J.Holland, strong vocational identity is "obvious and stable picture" of an individual goals for career, his/her interests, personality, and abilities. Holland,

Daiger and Power, (1980) have studied on the one's career decision making power and ability to take actions on career related decisions.

THEORIES OF VOCATIONAL IDENTITY

According to Zunker (2002) trait and factor theory and the person environmental theory just focused on appropriate matching of one's abilities and job traits, but they donot focus on career developmental process throughout the life span. Vondracke, (2001) stated, that career developmental process should be studied through different perspectives of life span. According to the study of Gysbers & Moore, 1975; Gysbers, 2001, it is not adequate to study career developmental process and job matching traits through a short period of time. It is important to study various stage of career development for adolescents to successfully prepare them for transition from high school to world work. (Erikson, 1971; Ginzberg et al., 1966; Gysbers & Henderson, 2006; Gysbers & Moore, 1975; Herr & Cramer, 1992; Super, 1957, 1980).

THE SOCIAL COGNITIVE CAREER THEORY

The significant concept of self efficacy of (Bandura, 1997, 2002) had adopted by Brown & Lent 1996; Lent et al., 1999; Lent et al., 2000 to better understand the career development constructs of individuals; including vocational interest, ability, process career decision making and many other. Human development was conceptualized by Bandura (1997, 2002) "as a reciprocal determinism, in which active person (P), behavior (B) and environment (E) were inter-related to each other. According to Bandura (1997, 2002), significant information for the person to assess self-efficacy in achievement is provided by various aspects of individual's past actual performance, explicit experiences, physiological reactions to that experiences, and different forms of persuasion. An individual is more confident in performing a particular task who perceived him/herself as more capable of doing that task.

THE THEORY OF OCCUPATIONAL CHOICE

This theory explained that process of career development is lifelong, which should be understood and studied through different task fulfillment at different life stages. According to Ginzberg and associates, (1966), it is not possible for an individual to achieve ultimate goal of perfect and successful career choice in short period of time, because it is a lifelong process. Theory described career decision making process on the bases of developmental process from age "11 to young adult age" Ginzberg and associates (1966), stated that there are three different career developmental stages to explain career decision making process.

GOTTFREDSON'S THEORY

This theory focus on the main role of one's self-concept that is related to one's social class, level of intelligence, gender role in career developmental process (Gottfredson's, 1981, 2002). An individual developed different career related images on the bases of gender, his/her career field or standard, apart from self-concept. They develop different career choice on self-concept and perception of career related barriers and outcome expectation, through circumscription process; ; one's determined career preference, :compromise"; evaluated assess of preferred career choice and eliminate those career choice with different perceived barrier according to reference of one's social class, level of intelligence, gender. According to Gottfredson, career

development occurs in four stages: (1) Ages 3-5: Orientation to Size and Power, where children develop an understanding of adulthood; (2) Ages 6-8: Orientation to Sex Roles, shaping gender role perceptions; (3) Ages 9-13: Orientation to Social Valuation, where social class and job preferences emerge; and (4) Age 14+: Orientation to Internal and Unique Self, fostering self-awareness and individuality.

MENTAL HEALTH

Taking care of one's mind is as vital as taking care of one's body. Overall health of an individual also included mental and emotional wellbeing. Wellbeing of mental health gives individuals chance to enjoy the pleasure of life, to cope with the stressful and trajectory events of life and it is spiritual and emotional well-being of individual. Mental health is positive point of one's emotional wellbeing and is underlie beneath one's own and other people's beliefs, values and dignity. Thus, mental health plays an important role in every individual's life in any society and culture and it is also describes as an ability of a person to adjust in his/her social and physical environment. There is no single universal definition of mental health because of it is diverse, multi-dimensional and still much debated construct. (Herron et al., 2000; Friedli, 2004; Warr, 1987). There are different definitions and descriptions of mental health, all over the world reflecting different variables such as gender, age, socioeconomic and cultural context of individuals etc. furthermore; every culture has adapted meaning of mental health's definition according to their cultural, emotional and psychological wellbeing status. Therefore, there is no single and ideal definition of mental health due to its complexity and subjectivity.

Mental health is now a days, have great concern with positive aspects of personality of individual's for example, resilience, ability to adjust with relations and environment, ability to love and handle matters of life, coping skills for stressful events,, ability to manage emotions and behavior issues, ability to identify self-concept and keep self-esteem high, ability to manage inner sense of coherence (Weare, 2004; MHF, 1999; HEA, 1997). According to Patel and Prince, 2010, in the recent studies of Global Mental Health, the construct of Mental Health has been researches and studied, in order to bring an improvement in metal health of individuals all over the world.

One study conducted by Aseltine and Gore (2005) on the issue of living station, work school roles and experiences and their impact on psychological wellbeing in high school. Sample included 1325 students from different districts of Boston. Results indicated that students who are enrolled in full time college programs have low level of depression and high level of positive life quality. Work disruption was associated with high level of depression and high negative life quality. Another study conducted in Anand College of Education, (2009), indicated that there is a association between academic anxiety and mental health. Above mentioned studies described that school environment and management influences mental health of individuals. On the other hand, it was clear that mental health is important factor for health condition of people. The mental health concept involve absence of the traditional concepts of psychopathology like depression and anxiety and presence of psychological well-being markers such as positive

interest in life, pleasure and enjoyment in life (World Health Organization, 2003; Ware, Snow, Kosinski, & Gandek, 1993).

Mental health may involve the “ability of individual to enjoy fun and happiness of life and to maintain balance between different activities and efforts to achieve psychological wellbeing”. According to Friedli, (2009), individuals who have good mental health, they are more prone to express their feeling and easily cope with stressful life events. Mental health is “positive state of mental condition, through which an individual identify his/her abilities to cope with stressfull life events, can put his/her efforts more productively and effectively, and can put his/her contribution for the welfare of community (World Health Organization, 2010).

CAREER INDECISION AND MENTAL HEALTH

In the period of career decision making, young adults and adolescents may have high level of stress, in order to attain their desire career. This period may be overwhelming for them due to stress and it cause effect on their career choice quality. According to Reece (2011), there is a relationship between career indecision and stress. In this study, it was also proposed that those who have high level of career indecision, they have high level of stress (Reece, 2011).

According to Creed et al. (2006), personal variables i.e. age, gender, may also effect career decision making and career indecision is associated with it. In s study, Career maturity and knowledge was predicted by age, gender and career indecision (Creed and Patton’s, 2003). In South Africa, a study conducted by Watson and van Aarde (2006), it was proposed career indecision level of colored individuals revealed that career decision making and career maturity was influenced by age and gender 50 percent of university students experience career related problems, most of which are related to being undecided about major occupation or subject, resultantly causing anxiety in first year of university students (Herr, Cramer, & Niles, 2004; Mubiana, 2009 cites in Talib & Aun, 2009).

According to Creed, Prideaux and Patton, (2005), career indecision is related with depression anxiety, lower life satisfaction, maladjustment in life and lower identity achievement. Additionally, adolescents still experience normal daily life experience and they linked it with career decision making which may influence their quality of life. Sometimes, it is challenge for students that they lack knowledge and information about different career alternative they would like to continue in future. It is important for students to get ready for future workplace, with education they are receiving at university and also with the help of proper career related guidance (Smith, 2001 cited in chaung et al., 2009).

VOCATIONAL IDENTITY AND MENTAL HEALTH

A number of studies have found association between vocational identity and psychological constructs of individuals for example study on relationship between vocational identity and psychological construts of undergraduate students (Strauser et al., 2008), of students of high school (Hirschi, 2011), relationship of personalities of social anxiety and intolerance of ambiguity among college students

(Leong & Morris, 1989), among students of high school association of self-esteem (Munson, 1992), and mental health reflected by different stressors among adolescents (De Goede et al.,

1999). On the other hand study conducted by Blinne and Johnston's (1998) found that there is no association between vocational identity and academic achievement among college students. Moreover, some other researchers investigated the influence of family on vocational identity of students which showed positive association between vocational identity and perceived quality of family relationship and family support for career related among college students (Hargrove, Creagh, & Burgess, 2002), among high school students (Hargrove, Inman, & Crane, 2005) and role of family among college students (Johnson, Buboltz, & Nichols, 1999).

These studies had verified significant roles of personal factors of individuals including perception of vocational stressors of individual and environmental factors of individual; that also included support of family in adolescent's vocational identity formation. All of the prior studies results were consistent with Holland (1985) study on vocational identity relationship with various career preference or choices and process career decision-making of individual and also provided evidence related role of individual's intrapersonal attributes and related factors to vocational identity formation in adolescents which showed significant need for further future studies. Anxiety can be divided into two types; a state or trait.

According to Savickas, (1999), in state anxiety it would include to temporary feeling of anxiety which are arises by specific threats and stressors but it may not always occur. According to Gordan & Meyer, (2002 cited in Van Reenen, 2010), trait anxiety would include an individual's odd level of anxiety and tendency to become anxious. It has been identified by the researches that career decidedness could be influenced by both trait and state anxiety.

METHODOLOGY

RESEARCH DESIGN

Present research is a co-relational cross-sectional research using a quantitative approach.

SAMPLE

To check the Internal Consistency and Reliability of the scales the sample of 40 male and female professionals were included. Professionals included are medical, engineering, teaching and engineering. These were the professionals who have completed their 16 years of education and currently in first year of their professional life. (n=40).

INSTRUMENT

Career Decision Difficulties Questionnaire (CDDQ; Gati, Krausz & Osipow, 1996): The CDDQ is a 44-item questionnaire developed to assess career decision-making difficulties based on the taxonomy proposed by Gati, Krausz, and Osipow (1996). The development of the questionnaire stemmed from a theoretical categorization of difficulties which individuals may experience as they go through the process of decision making. The taxonomy has several aspects related to career decision making difficulties. (Tien, 2005 cited in Gati, Krausz & Osipow, 1996). The Career Decision Making Difficulty Questionnaire consists of 44 statements which investigate the challenges that people encounter as they make decisions pertaining to their career paths. These statements are scored on nine point likert scale where 1 = does not describe me and 9 = describes me well. The questionnaire has two broad categories which are subdivided into three sub-categories. The three sub-categories are: (1) **lack of readiness** (2) **lack of information** (3) the

inconsistent information. The internal consistency reliability coefficients ranged from .70 to .93 for the three scales and it was .95 for the full questionnaire. For our study, the alpha internal consistency reliability coefficients were .80, .95, .91, and .96 for the Lack of Readiness, Lack of Information, and Inconsistent Information subscales, and the full scale, respectively. The CDDQ has been found to have a good convergent validity with the Career Decision Scale and good discriminated validity (Lancaster et al. 1999; Osipow, 1999).

My Vocational Situation scale MVS (Tinsley, Bowman, & York, 1989): The MVS is designed to identify and assess three facets of vocational decision-making: (1) Vocational Identity, (2) Occupational Information, and (3) Barriers that the respondent perceives as limitations to pursuing various occupational goals and objectives. The MVS is comprised of 18 true/false items (Vocational Identity scale), and 8 yes/no items (Occupational Information and Barriers scales). The number of responses marked "false" is added to obtain the total Vocational Identity score, with higher scores indicating stronger vocational identity. The Occupational Information and barriers total scores are calculated by adding the total number of "no" responses provided. "Low scores on the Vocational Identity scale indicate confusion about a respondent's identity and a lack of self-satisfaction". Low scores on occupational information and barriers scale indicate significant obstacles to career choice (Tinsley, Bowman, & York, 1989).

Mental Health Inventory MHI 18-items (Veit and War, 1983): The Mental Health Inventory (MHI) is a widely-accepted measure of overall emotional functioning developed by Veit and Ware (1983) for the Rand Health Insurance Experiment. It covers a wide range of negative and positive emotions, not just psychopathology. The MHI has 4 subscales (Anxiety, Depression, Behavioral Control, and Positive Affect) and 1 total score. The MHI-18 is a shortened version of the original 36-item scale which was developed for use in general populations by Veit and Ware to assess psychological distress and wellbeing in general populations. It contains items assessing anxiety, depression, behavioral control, and positive affect. Psychological well-being is comprised of positive affect and emotional ties. Psychological distress consists of depression, anxiety, and loss of behavioral/ emotional control. Subjects are asked to indicate how often they have experienced various emotions during the prior four week period. Choices are given along a 6-point scale, ranging from 1 (all of the time) to 6 (none of the time).

Procedure: Sample was taken from Fouji Foundation medical College Rawalpindi, UET Taxila, and Government collage Haripur, and banks in Rawalpindi. Firstly, organizations and institutes were approached and researcher took the permission from administration. Researcher enlightened the nature and objective of the study and assured administrator that results only used for the research purpose only and keep confidential. After taking permission, questionnaires were handed over the participants and researcher told them not to leave any of the questions unmarked. There was no restriction of time. If the participants do not understand any question, they were provided with the essential guidelines and finally the data was collected. Later data was analyzed through SPSS-21

RESULTS AND FINDINGS

TABLE 1: RELATIONSHIP BETWEEN VOCATIONAL IDENTITY, CAREER DECISION MAKING DIFFICULTIES AND MENTAL HEALTH ALONG WITH THEIR SUBSCALES IN ENGINEERING PROFESSIONALS

	M	SD	A	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1.MVS	39.65	6.17	.87		.97**	.61**	.66**	-	-	-	.01	-	-	-	-	-	.51**	.34**	.372**	.49**	.38**
2.VI	27.90	4.70	.84			.46**	.52**	.63**	.40**	.67**		.34**	.55**	.57**	.49**	.34**					
3.OI	5.31	1.26	.60				.28**	.61**	.38**	.65**	.01	.33**	.53**	.55**	.45**	.33**	.52**	.40**	.408**	.49**	.36**
4.CB	6.44	1.28	.59					.33**	-.23*	.29**	.04		.35**	.34**							
5.CDDQ	204.80	63.44	.96					.47**	.30**	.56**	.10	.29**	.33**	.39**	.50**	.39**	.38**	.17	.177	.46**	.39**
6.LM	13.99	4.83	.40						.69**	.75**	.09	.65**	.93**	.92**	.69**	.56**	.49**	.33**	.270**	.53**	.43**
7.ID	16.75	8.50	.85							.49**	.17	.45**	.55**	.59**	.50**	.44**	-.25*	-.17	-.219*	-.26*	-.16
8.DM	18.89	5.19	.63								.06	.44**	.56**	.58**	.66**	.56**	.47**	.35**	-.39**	.48**	.30**
9.LK	15.16	6.59	.93									.03	-.06	.00	.02	.09	.17	.08	.10	.17	.20*
10.LI	62.95	27.83	.97										.59**	.53**	.34**	.24*	.41**	.29**	-.22*	.38**	.39**
11.UI	33.15	14.42	.97											.92**	.48**	.35**	.46**	.30**	-.19	.52**	.46**
															.49**	.36**	.43**	.29**	-.18	.49**	.43**

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TABLE 2: RELATIONSHIP BETWEEN VOCATIONAL IDENTITY, CAREER DECISION MAKING DIFFICULTIES AND MENTAL HEALTH ALONG WITH THEIR SUBSCALES IN MEDICAL PROFESSIONALS

	M	SD	A	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1.MVS	41.28	5.99	.88	.97**	.50**	.67**	-.37**	-.13	-.37**	-.50**	-.18	-.23*	.40**	.24*	.52**	.29**	.32**				
2.VI	29.26	4.82	.87																		
3.OI	4.98	1.16	.70																		
4.CB	7.04	1.08	.55																		
5.CDDQ	188.50	59.28	.95																		
6.LM	13.18	4.40	.39																		
7.ID	17.82	7.40	.72																		
8.DM	16.97	6.42	.76																		
9.LK	14.44	6.25	.85																		
10.LI	57.93	26.67	.96																		
11.UI	28.57	13.21	.94																		
12.IC	25.39	8.54	.76																		
13.EC	14.20	6.821	.96																		
14.MHI	72.80	11.78	.72																		
15.Anx	19.28	4.33	.70																		
16.Dep	15.68	3.29	.60																		
17.Beh	16.70	3.36	.59																		
18.Pos	21.14	3.45	.70																		

***p<.000 **p<.01 *p<.05 Note; MVS: My Vocational Situation Scale, VI: Vocational Identity, OI: Occupational Information, CB: Career Barrier, CDDQ: Career Decision Making Difficulty Questionnaire, LM: Lack of Motivation, ID: Indecisiveness, LK: Lack of Knowledge, LIs: Lack of information about self, LIO: Lack of Information about Occupation, UI: Unreliable Information, IC: Internal Conflicts, EC: External Conflicts, MHI: Mental Health Inventory, Anx: anxiety, Dep: Depression, Beh: Behavior Control, Pos: Positive Effect

Table 2 show alpha reliability and correlation among study variables. Results of the table revealed that all the scales are having good reliability expect subscale lack of motivation whose reliability is .40. Furthermore table revealed that Vocational identity is significantly negatively related with career decision making difficulties and significantly positively related with mental health among medical profession. Career decision making difficulties are significantly negatively related with mental health. Career barriers are significantly negatively related with indecisiveness and significantly positively related to mental health. Indecisiveness is significantly negatively related with mental health in medical professional.

TABLE 3: RELATIONSHIP BETWEEN VOCATIONAL IDENTITY, CAREER DECISION MAKING DIFFICULTIES AND MENTAL HEALTH ALONG WITH THEIR SUBSCALES IN TEACHING PROFESSIONALS

	M	SD	a	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1.MVS	36.98	6.86	.90	1	.97**	.79**	.66**	-.69**	-.52**	-.65**	-.49**	-.58**	-.68**	-.64**	-.57**	-.17	.46**	.23*	.39**	.41**	.29**
2.VI	25.40	4.93	.87			.72**	.50**	-.65**	-.46**	-.61**	-.47**	-.55**	-.62**	-.59**	-.52**	-.17	.42**	.19*	.39**	.37**	.23*
3.OI	5.36	1.29	.64				.33**	-.54**	-.44**	-.53**	-.38**	-.47**	-.56**	-.48**	-.41**	-.03	.32**	.10	.27**	.19	.31**
4.CB	6.22	1.59	.82					-.56**	-.44**	-.46**	-.33**	-.42**	-.54**	-.53**	-.48**	-.19*	.43**	.30**	.25*	.44**	.24*
5.CDDQ	229.17	66.06	.97						.75**	.79**	.72**	.80**	.95**	.94**	.87**	.39**	.38**	-.14	-.29**	-.37**	-.28**
6.LM	15.61	5.18	.64							.68**	.52**	.65**	.58**	.66**	.75**	.19	-.38**	-.17	-.17	-.32**	-.39**
7.ID	20.23	7.65	.90								.43**	.59**	.70**	.71**	.65**	.22*	-.40**	-.22*	-.27**	-.39**	-.26**
8.DM	17.71	5.86	.85									.68**	.66**	.66**	.56**	.09	-.11	.12	-.09	-.05	-.24*

TABLE 4 RELATIONSHIP BETWEEN VOCATIONAL IDENTITY, CAREER DECISION MAKING DIFFICULTIES AND MENTAL HEALTH ALONG WITH THEIR SUBSCALES IN BANKING PROFESSIONALS

	M	SD	a	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1.MVS	40.87	6.01	.87		.97**	.63**	.65**	-.66**	-.45**	-.61**	-.08	-.54**	-.60**	-.60**	-.34**	-.37**	.48**	.46**	.49**	.39**	.27**
2.VI	28.76	4.63	.85			.48**	.53**	-.64**	-.42**	-.64**	-.05	-.53**	-.58**	-.59**	-.31**	-.35**	.50**	.46**	.51**	.39**	.30**
3.OI	5.44	1.249	.56				.26**	-.36**	-.27**	-.17	-.12	-.32**	-.37**	-.34**	-.16	-.10	.18	.19	.20*	.12	.07
4.CB	6.67	1.14	.44					-.49**	-.36**	-.41**	-.07	-.34**	-.42**	-.39**	-.36**	-.40**	.31**	.31**	.26**	.32**	.14
5.CDDQ	198.29	57.42	.96						.59**	.67**	.33**	.79**	.94**	.93**	.51**	.58**	-.58**	-.49**	-.49**	-.57**	-.39**
6.LM	14.08	4.49	.38							.54**	.29**	.43**	.50**	.43**	.21*	.28**	-.46**	-.37**	-.48**	-.36**	-.32**
7.ID	16.34	7.18	.86								.20*	.39**	.49**	.51**	.43**	.49**	-.69**	-.62**	-.70**	-.51**	-.45**
8.DM	17.50	5.62	.72									.34**	.26**	.26*	-.10	-.07	-.07	-.06	-.08	-.10	.01
9.LK	15.00	5.49	.90										.79**	.77**	.19	.26**	-.37**	-.31**	-.32**	-.43**	-.21*
10.LI	62.42	26.11	.98											.91**	.29**	.38**	-.49**	-.39**	-.41**	-.54**	-.33**
11.UI	30.89	12.69	.95												.39**	.43**	-.51**	-.44**	-.39**	-.52**	-.35**
12.IC	26.14	7.75	.71													.73**	-.28**	-.255*	-.21*	-.22*	-.23*
13.EC	15.92	6.07	.91														-.39**	-.32**	-.31**	-.34**	-.33**
14.MHI	71.04	12.19	.87															.87**	.85**	.85**	.74**
15.Anx	19.20	3.89	.71																.81**	.66**	.41**
16.Dep	15.07	3.89	.79																	.57**	.42**
17.Beh	16.21	3.09	.55																		.65**

18.Pos 20.56 3.80 .66

***p<.000 **p<.01 *p<.05 Note; MVS: My Vocational Situation Scale, VI: Vocational Identity, OI: Occupational Information, CB: Career Barrier, CDDQ: Career Decision Making Difficulty Questionnaire, LM: Lack of Motivation, ID: Indecisiveness, LK: Lack of Knowledge, LIs: Lack of information about self, UI: Unreliable Information, IC: Internal Conflicts, EC: External Conflicts, MHI: Mental Health Inventory, Anx: anxiety, Dep: Depression, Beh: Behavior Control, Pos: Positive Effect

Table 4 show alpha reliability and correlation among study variables. Results of the table revealed that all the scales are having good reliability expect subscale career barriers and lack of motivation whose reliability is .44 and .38 respectively. Furthermore table revealed that Vocational identity is significantly negatively related with career decision making difficulties and significantly positively related with mental health among banking profession. Career decision making difficulties are significantly negatively related with mental health. Career barriers are significantly negatively related with indecisiveness and significantly positively related to mental health. Indecisiveness is significantly negatively related with mental health in banking professional.

TABLE 5: OVERALL DIFFERENCE AMONG ENGINEERING, MEDICAL, TEACHING AND BANKING PROFESSIONALS ON VOCATIONAL IDENTITY, CAREER DECISION MAKING DIFFICULTIES AND MENTAL HEALTH ALONG WITH THEIR SUBSCALES

	Engineering (n = 100)		medical (n = 100)		Teaching (n = 100)		Banker (n = 100)			
<i>Variables</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>P</i>
1.MVS	39.65	6.167	41.28	5.985	36.98	6.855	40.87	6.008	9.572	.00
2.VI	27.90	4.700	29.26	4.823	25.40	4.926	27.83	4.980	12.915	.00
3.OI	5.3100	1.26087	5.3100	1.26087	5.3100	1.26087	5.4400	1.24981	2.650	.05
4.CB	6.4400	1.28959	7.0400	1.08171	6.2200	1.59912	6.6700	1.13756	7.346	.00
5.CDDQ	204.80	63.440	188.50	59.289	229.17	66.062	198.29	57.419	7.906	.00
6.LM	13.99	4.834	13.18	4.400	15.61	5.179	14.08	4.485	4.589	.00
7.ID	16.75	8.500	17.82	7.400	20.23	7.654	16.34	7.176	5.139	.00
8.DM	18.89	5.191	16.97	6.424	17.71	5.861	17.50	5.620	1.959	.12

9.LK	15.16	6.585	14.44	6.245	17.05	6.314	15.00	5.494	3.378	.01
10.LI	62.95	27.829	57.93	26.668	72.60	25.199	62.42	26.111	5.443	.00
11.UI	33.15	14.417	28.57	13.213	35.86	12.144	30.89	12.688	5.628	.00
12.IC	27.24	9.099	25.39	8.539	29.99	10.459	26.14	7.746	4.998	.00
13.EC	16.67	6.490	14.20	6.821	20.12	6.730	15.92	6.070	14.484	.00
14.MHI	73.13	12.674	72.80	11.776	67.16	9.401	71.04	12.195	5.598	.00
15.Anx	20.13	4.019	19.28	4.328	17.67	3.282	19.20	3.895	6.893	.00
16.Dep	15.85	3.788	15.68	3.296	13.66	3.270	15.07	3.896	7.748	.00
17.Beh	16.49	3.457	16.70	3.359	15.58	2.775	16.21	3.099	2.337	.07
18.Pos	20.66	4.645	21.14	3.450	20.25	4.034	20.56	3.804	.848	.46

Note: significant results are reported In this Table, CI=Confidence Interval, LL=Lower Limit, UL=Upper Limit. Note: significant results are reported In this Table, CI=Confidence Interval, LL=Lower Limit, UL=Upper Limit. Note; TV: My Vocational Situation Scale, Vi: vocational Identity, OI: Occupational Information, CB: Career Barrier, TC: Career Decision Making Difficulty Questionnaire, LM: Lack of motivation, ID: Indecisiveness, LK: Lack of Knowledge, LI: Lack of information, UI: Unreliable information, IC: Internal conflicts, ET: External Conflicts, MH: Mental Health Inventory, Anx: anxiety, Dep: Depression, Beh: Behavior Control, Pos: Positive Effect

Above table 5 revealed overall differences among engineering, medical, teaching and banking between professions. Results of the table revealed that medical professionals were high on vocational identity, teachers were high on career decision making difficulties and Engineers were high on mental health as compare to bankers.

TABLE 6: CAREER INDECISION AND VOCATIONAL IDENTITY AS A PREDICTOR OF MENTAL HEALTH IN PROFESSIONALS

Variables		B	S.E	β	P	R ²	ΔF
DV	IV	Engineers					
Mental Health	Constant	57.702	11.219		.000	.313	22.075
	Career Indecision	-.054	.021	-.270	.012		
	Vocational Identity	.949	.286	.352	.001		
		Medical					
Mental Health	Constant	51.905	10.437		.000	.142	8.033
	Career Indecision	-.015	.022	-.077	.480		
	Vocational Identity	.812	.265	.333	.003		
		Teachers					
Mental Health	Constant	59.059	8.835		.000	.197	11.919
	Career Indecision	-.027	.017	-.191	.111		
	Vocational Identity	.565	.227	.296	.015		
		Bankers					
Mental Health	Constant	72.673	11.410		.000	.36	28.032
	Career Indecision	-.093	.022	-.438	.000		
	Vocational Identity	.585	.278	.222	.038		

Results of above table revealed that career indecision is statistically significant negatively predicting mental health in Engineering professionals ($\beta = .27$, $P = .01$) and vocational identity is statistically significantly positively predicting mental health in Engineering professionals ($\beta = .35$, $P = .00$). Career indecision is non-significant in medical profession and vocational identity is statistically significantly positively predicting mental health in medical profession ($\beta = .33$, $P = .00$). Table further revealed that career indecision is statistically non-significant predicting mental health in teaching professionals and vocational identity is statistically significant positively predicting mental health in teaching profession ($\beta = .29$, $P = .01$).

CONCLUSION

The study explored the relationship among career decision-making difficulties, vocational identity, career barriers, and mental health across four major professions in Pakistan: engineering, medical, teaching, and banking. A total of 400 professionals from Rawalpindi, Islamabad, Taxila, and Haripur participated. The study examined the role of demographic factors in shaping career-related challenges and mental well-being, employing validated scales such as the Career Decision Difficulties Questionnaire (CDDQ) and the Mental Health Inventory. Findings revealed significant correlations between vocational identity and mental health, as well as negative associations between career decision-making difficulties and mental well-being across all professions. Gender-based differences indicated that female professionals faced greater career barriers, indecisiveness, and mental health challenges compared to males, particularly in medical and banking professions. These findings align with previous research suggesting career indecision is linked to anxiety, life dissatisfaction, and emotional distress.

The study confirmed that vocational identity positively correlates with mental health while negatively correlating with career indecision. Career barriers were found to negatively impact career decision-making and mental well-being, with gender and SES influencing these relationships. While prior research shows mixed findings on gender differences in career indecision, this study suggests Pakistani women face more obstacles in career decision-making. Overall, the results highlight the importance of vocational identity and mental health support in professional career development.

REFERENCES

1. Abbasi, M. N., & Sarwat, N. (2014). Factors inducing career indecision among Pakistani students. *Pakistan Journal of Psychological Research*, 29(1), 85-105.
2. Ashby, J. D., Wall, H. W., & Osipow, S. H. (1966). Vocational decision-making: A study of career indecision among college students. *Journal of Counseling Psychology*, 13(3), 312-317.
3. Aseltine, R. H., & Gore, S. (2005). Work, school, and psychological well-being of adolescents. *Journal of Health and Social Behavior*, 46(3), 335-349.
4. Bandura, A. (1997). *Self-efficacy: The exercise of control*. W. H. Freeman.
5. Bandura, A. (2002). Social cognitive theory in cultural context. *Applied Psychology: An International Review*, 51(2), 269-290.
6. Borgen, W. A., & Hiebert, B. (2006). Career guidance and counseling for youth: What adolescents and young adults are telling us. *International Journal for the Advancement of Counselling*, 28(4), 389-400.
7. Brown, S. D., & Lent, R. W. (1996). A social cognitive framework for career choice counseling. *The Career Development Quarterly*, 44(4), 354-366.
8. Brown, S. D., & Rector, C. (2008). Understanding and facilitating career decision-making processes. *Journal of Career Development*, 34(2), 185-206.
9. Chartrand, J. M., Rose, M. L., Elliott, T. R., Marmarosh, C., & Caldwell, C. (1993). Peering into the career indecision crystal ball: A theoretical and empirical perspective. *Journal of Counseling Psychology*, 40(4), 456-464.

10. Creed, P. A., Patton, W., & Prideaux, L. A. (2006). Causal relationship between career indecision and career decision-making self-efficacy: A longitudinal cross-lagged analysis. *Journal of Career Development*, 33(1), 47-65.
11. Creed, P. A., Prideaux, L. A., & Patton, W. (2005). Antecedents and consequences of career decisiveness: A longitudinal study. *Journal of Vocational Behavior*, 67(3), 397-414.
12. Creed, P. A., & Patton, W. (2003). Differences in career attitudes and career knowledge for high school students with and without work experience. *International Journal for Educational and Vocational Guidance*, 3(1), 21-33.
13. Crites, J. O. (1969). *Vocational psychology: The study of vocational behavior and development*. McGraw-Hill.
14. Erikson, E. H. (1968). *Identity: Youth and crisis*. W. W. Norton & Company.
15. Friedli, L. (2004). *Mental health, resilience and inequalities*. WHO Regional Office for Europe.
16. Friedli, L. (2009). *Mental health, resilience, and inequalities: A public health perspective*. World Health Organization.
17. Gati, I. (1998). The structure of career decision-making difficulties: A cross-cultural comparison. *Journal of Vocational Behavior*, 52(1), 56-74.
18. Gati, I., & Saka, N. (2001). High school students' career-related decision-making difficulties. *Journal of Counseling & Development*, 79(3), 331-340.
19. Gati, I., Krausz, M., & Osipow, S. H. (1996). A taxonomy of difficulties in career decision making. *Journal of Counseling Psychology*, 43(4), 510-526.
20. Germeijs, V., & De Boeck, P. (2002). Career indecision: Three factors from decision theory. *Journal of Vocational Behavior*, 60(3), 485-502.
21. Ginzberg, E., Ginsburg, S. W., Axelrad, S., & Herma, J. L. (1966). *Occupational choice: An approach to a general theory*. Columbia University Press.
22. Gottfredson, L. S., Gottfredson, G. D., Payne, T. J., & Gottfredson, D. C. (2005). Influence of gender and race on career self-efficacy and career indecision. *Journal of Career Assessment*, 13(2), 165-181.
23. Guay, F., Ratelle, C. F., Senécal, C., Larose, S., & Deschênes, A. (2006). The role of autonomy support and motivation in predicting the adjustment of first-year college students. *Journal of Educational Psychology*, 98(2), 257-268.
24. Guay, F., Senécal, C., Gauthier, L., & Fernet, C. (2003). Predicting career indecision: A self-determination theory perspective. *Journal of Counseling Psychology*, 50(2), 165-177.
25. Hall, D. T., & Chandler, D. E. (2005). Psychological success: When the career is a calling. *Journal of Organizational Behavior*, 26(2), 155-176.
26. Hartung, P. J., Porfeli, E. J., & Vondracek, F. W. (2005). Child vocational development: A review and reconsideration. *Journal of Vocational Behavior*, 66(3), 385-419.
27. Holland, J. L., Daiger, D. C., & Power, P. G. (1980). My Vocational Situation: Description of an experimental diagnostic form for the selection of vocational assistance. *Journal of Vocational Behavior*, 16(1), 33-47.

28. Jones, L. K., & Chenery, M. F. (1980). Multiple subtypes among vocationally undecided college students: A model and assessment instrument. *Journal of Counseling Psychology*, 27(5), 469-477.
29. Kuzgun, Y. (2006). *Career guidance and counseling*. Nobel Publishing.
30. Lock, R. D. (2009). *Taking charge of your career direction: Career planning guide, book 1* (5th ed.). Cengage Learning.
31. Mbware, J. (2004). The impact of parental employment status on career aspirations of secondary school students in South Africa. *Journal of Educational Psychology*, 22(4), 241-257.
32. Osipow, S. H. (1987). *Career decision scale manual*. Psychological Assessment Resources.
33. Osipow, S. H. (1999). Assessing career indecision. *Journal of Vocational Behavior*, 55(2), 147-154.
34. Parsons, F. (1909). *Choosing a vocation*. Houghton Mifflin.
35. Phillips, S. D., & Jome, L. M. (2005). Vocational choices: A decision-making perspective. In S. D. Brown & R. W. Lent (Eds.), *Career development and counseling: Putting theory and research to work* (pp. 97-121). Wiley.
36. Porfeli, E. J., & Skorikov, V. B. (2010). Specific and diversified career exploration in adolescence: Effects on career development. *Journal of Adolescence*, 33(1), 91-98.
37. Reitman, F., & Schneer, J. A. (2003). The promised path: A longitudinal study of managerial careers. *Journal of Managerial Psychology*, 18(1), 60-75.
38. Savickas, M. L. (1985). Career maturity: The construct and its measurement. *Vocational Guidance Quarterly*, 33(4), 219-223.
39. Shafi Abadi, A. (2002). *Career guidance and vocational counseling: Theories and applications*. Tehran: Roshd Publications.
40. Sharf, R. S. (2016). *Applying career development theory to counseling* (6th ed.). Cengage Learning.
41. Smart, R. M., & Peterson, C. (1997). Super's career stages and the decision-making process. *Journal of Career Assessment*, 5(3), 373-388.
42. Stead, G. B., & Watson, M. B. (1999). *Career psychology in the South African context*. Van Schaik Publishers.
43. Talib, J. A., & Aun, T. K. (2009). Predictors of career indecision among Malaysian undergraduate students. *European Journal of Social Sciences*, 8(2), 215-224.
44. Tien, H. L. S. (2005). The validation of career decision-making difficulties scale in a Chinese culture. *Journal of Career Assessment*, 13(1), 114-127.
45. Tiedeman, D. V., & O'Hara, R. P. (1963). Career development: Choice and adjustment. *The College Board Review*, 51, 9-13.
46. Tyler, L. E. (1969). *The work of the counselor*. Appleton-Century-Crofts.
47. Van Reenen, J. (2010). Theories of career choice and vocational development. *Vocational Behavior Journal*, 45(2), 255-278.