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THE ROLE OF LEARNING STYLES IN DETERMINING CAREER MAKING CHOICES AMONG UNIVERSITY STUDENTS

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Abstract
This paper examined how the learning styles could be used to predict career indecisiveness in university students. Hypotheses proposed were: (1) The learning styles would have a significant influence on career indecisiveness among the university students; (2) Female students would report high levels of career indecisiveness compared to the males; and (3) The first-year students would exhibit higher levels of career indecisiveness compared to the final-year students. The total sample of 400 students (N = 236 first-year; N = 164 final-year), 111 males and 289 females aged between 18 and 32 years (M = 21.16, SD = 2.79) were recruited and selected within the University of Karachi and as a part of various departments. The participants were asked to complete a demographic questionnaire, a Kolb's Learning Style Inventory 3.1 (1971), and an instrument, the Career Decision Scale (1989). The analysis of data was conducted on the version 21 of the SPSS. The findings indicated that learning styles had a significant predictability with career indecisiveness. First-year students had a considerably high score on career indecisiveness as compared to their final year student counterparts. The results indicate that the dimensions of learning style differ according to sex and academic level, which affects the process of career decision making of students. The discussion of implications and suggestions to the academic supporting and career counseling interventions are provided.

Keywords: *career indecisiveness, university students, learning styles, first-year students, final-year students*

Introduction:

Career choice has been identified as one of the most important developmental tasks of university students, and it is known to influence their academic work, functioning, mental and emotional stability, and future satisfaction with life (Osipow, 1987). Nonetheless, career indecisiveness, a state of being not able to make a career decision or make a decision with certainty or uncertainty surrounding it, is common among the students and may become an obstacle to personal and professional development. Career indecisiveness is a phenomenon that has been increasingly concerned in Pakistan, partly because of the lack of career-guidance infrastructure, Educational systems that are not flexible, social influences such as gender and family expectations (Saeed, 2002; Malik & Khan, 2016).

Learning styles, which are preferred methods by which individuals perceive, process and hold information, have become an important factor among other factors affecting career decision-making (Kolb, 1984). Experiential Learning Theory (ELT) developed by Kolb uses four types of learning modes, Abstract Conceptualization (AC), Concrete Experience (CE), Reflective Observation (RO), and Active Experimentation (AE). These tend to become four major styles of learning namely Diverging, Converging, Assimilating, and Accommodating. Learning style variations are likely to affect the manner in which students investigate career possibilities, perceive information about jobs, and finally, pick career choices (Zhou & Santos, 2007).

There has been very little empirical study to establish the relevancy of the relationship among learning styles and career decision-making in the Pakistani context. Nonetheless, the

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present literature indicates that Pakistani students tend to exhibit varied learning styles in terms of gender, educational field, and learning institution design (Rashid & Qaisar, 2017).

Literature Review

The definition of career according to the business dictionary defines the progress of the people in their occupation over the years as the career (Business dictionary, 2015). Higher education students have grown some understanding of being able to select their own careers and are more inclined to select careers using which can be derived the quality of lives as well as success and accomplishment (Arif et al., 2017). Due to the fact that the information technology has appeared and has gotten highly developed, and the connections among students in social media with representatives of various professions made the needs and demands of students high in terms of careers (Arif et al., 2013; Arif et al., 2017).

The physical and also the social environment of an educational institution which determines whether students would carry on with their career or not, and with that also comes the enhanced teaching styles which motivates the student to remain attached with career choices (Hanson et al., 2016; Loes & Pascarella, 2015). The motivation and empowerment of students on part of their teachers in choosing the career they want to undertake is more helpful than compared to that offered by the counselors (Edwards & Quinter, 2011; Barley et al., 2017).

The social economic background of students further adds its role in career choice of a person because it either builds or kills the ambitions and goals of a student towards future education (Humayon et al., 2018; Raque-Bogdan & Lucas, 2016). The privatization has even left several goal oriented students without the ability to pursue their careers in fields of their choice because of a lack of good socioeconomic circumstances of the family since many of its educational institutions became privately owned (Noreen & Khalid, 2012). It is even very difficult for girls compared to boys to pursue careers of their choice in Pakistan (Aziz & Kamal, 2012; Khattab, 2015).

According to Abbasi and Sarwat (2014), the girls are regarded as the second income earner in most of the families in Pakistan, hence this attitude and perception made by families towards their girls makes them to settle in low profile careers (Aziz, & Kamal, 2012). Despite limited inclination and bias against females in Pakistan, the higher education exhibits a non-biased attitude towards females which, nonetheless, has some families being critical and biased about the choice of a career among their daughter or female child (Bordoloi & Das, 2017; Malik & Courtney, 2011).

McLeod (2010) dictated the learning styles as a unique and personal learning procedure that contains problem solving strategies, practices applied in decision making, responses and reactions in the presence of others.

Visual Learning Style

The type of person that is a visual learner is the person that gets lost in verbose activity, who would rather watch than speak, has a good vocabulary, is able to memorize a lot of things easily by graphics, and he is detailed, seeing anything and everything (Chauhan, 2005).

The Auditory Learning Style

Auditory learning style is a style of learning in which an individual prefers to learn things through communicating and conversing with others (Lovelace, 2005). They are better in solving the real problems and also in answering the traditionally designed tests (Fine, 2003).

Kinesthetic or Tactile Learning Style

This is one of such a learning style where students acquire instructions in a demonstrative and field-based way (Dunn et al., 2009). This type of learning is a mixture of two types of

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experience based learning namely concrete experience (CE) and active experimentation (AE) (Coffied et al., 2004).

Based on literature review, the following hypotheses were framed:

1. Career indecisiveness among the university students would be predicted by their learning styles.
2. Career indecisiveness among university students would differ between the genders.
3. First year students would have a greater score than final year students on career indecisiveness scale.

METHODOLOGY

This section summarizes the research methods, instruments, sample size, and sampling methods applied in the study. It also discusses the procedure, and ethical considerations

Sample

Data were collected using the sample population of 400 respondents (N=111 males and N=289 females) aged between 18-32 years (M=21.16, SD=2.79). Courses of various departments of University of Karachi (morning and evening programs) of the first year (N=236) and final year (N=164) courses of bachelors and masters were approached. The data collection was carried out with the aid of the purposive selection methods. The inclusion and exclusion criteria of the research were that the research participants must be a student of sciences, business, social sciences, of University of Karachi. The participants are preferably to be aged 18-32 years. The participants should be of the first year and final year of different departments at the University of Karachi. Lastly, the study excluded participants who were separated and divorced.

Measures

The Measures utilized included Demographic Information Questionnaire, The Learning Style Inventory (LSI) Version 3.1 (Kolb et al., 2005), and Career Decision Scale (CDS) (Osipow et al., 1970).

Sociodemographic Variables Questionnaire

A self-designed questionnaire was used to collect demographic information including age, gender, birth order, qualification, department, year of study, occupation and socioeconomic status.

Learning Style Inventory (LSI) Version 3.1

Kolb (2005) developed the LSI 3.1, which is a self-report measure based on experiential learning theory. It recognizes four learning styles (diverger, converger, accommodator, and assimilator) by means of 80 items measuring Concrete Experience, Reflective Observation, Abstract Conceptualization, and Active Experimentation. The scale has good reliability with internal consistency of a = 0.70 and moderate test-retest.

Career Decision Scale (CDS)

The CDS was created, by Osipow et al. (1970) for measuring career indecisiveness. It is a set of 19 items scored on a 4-point scale and is much translated. The scale is most frequently used for research, counseling and career planning for students and professionals.

Procedure

The participants of this research were searched and selected using a purposive sampling technique. The scales which have been administered in this research include demographic questionnaire, Learning Style Inventory by Kolbe (1999), and Career decision scale (CDS) by Osipow (1999). Short introduction about the research was provided in informed consent form and the rights to confidentiality presented to the participants.

The data was collected by approaching participants of classes BSc and Masters of various departments of the University of Karachi upon purposive method of sampling. The research was conducted by interviewing all of the participants in their classrooms. The scales were all

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administered in a style of group and the participant used about 30-35 minutes in completing the scales.

Ethical Considerations

Researcher maintained ethical consideration throughout the research Ethical principles were observed throughout the research as given by APA. The objective of the work, research procedure and the material used in the study should be thoroughly inspected and approved by APA.

RESULTS

Table 1

Summary of Demographic characteristics of the Sample

Demographic Characteristics	*F*	*%*
Gender		
Male	111	27.8
Female	289	72.3
Birth Order		
First born	142	35.5
Middle born	175	43.8
Last born	83	20.8
Marital Status		
Single	351	87.8
Married	43	10.8
Socioeconomic status		
Lower	14	3.5
Middle	308	77.0
Upper	78	19.5
First choice of subject after Secondary School (12 grade)		
Yes	220	55.0
No	180	45.0
Completed	28	7.0
Dropped	85	21.3

Note: N= 400.

According to Table 1, the sample included socio-demographic characteristics showing data that the females were more partaking than the males in the study. Also, the focus of the sample was largely composed of single status and middle SES. In addition, the most of the subjects of participants were their first preference following intermediate (12 grade). But the other parts of the participants who had other first choices gave up their preferable program after first semester or two to three months.

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Table 2

Linear Regression Coefficients of Learning styles with Career Indecisiveness Among University Students

	CET			*ROT*			*ACT*			*AET*		
	B	**SEB**	***β***	**B**	**SEB**	***β***	**B**	**SEB**	***β***	**B**	**SEB**	***β***
CI	-.120	.105	-.076	-.216	.124	-.110	-.447	.109	-.229	.174	.115	.110
R^2			.077			.077			.077			.077
ΔR^2			.067			.067			.067			.067
F			8.126*			8.126			8.126			8.126

*p<.05, **p<.01*

Note: CI: Career Indecisiveness, ROT: reflective observation, CET: concrete experience, AET: active experimentation, ACT: abstract conceptualization

The results of the linear regression analysis presented in Table 2 suggest that among the university students, learning styles is a significant predictor of career indecisiveness (R^2=.077, F=8.126, p<.05), and the likelihood is 7.7 percent that CET, AET, ROT, ACT will predict career indecisiveness of students in university.

Table 2

Linear Regression Analysis of the Variation in Career Indecisiveness Among First and Last Year Students

Variable	*N*	*M*	*SD*	*t*	*df*	*Sig.*
1st Year	236	40.92	7.435	3.466**	398	.001
Final Year	164	38.15	8.432			

Note: *p < .05, **p<.01

Table 2 indicates that there is significant difference in mean among first year and final year students in career indecisiveness where [t(398)=3.466, p=.001]. It can be observed that first year students exhibit greater indecisiveness in their career (M=40.92, SD=7.435) than the last year students (M=38.15, SD=8.432).

Table 3

Linear Regression Analysis of Variation in Career Indecisiveness in Gender Among University Students

Variable	*N*	*M*	*SD*	*t*	*df*	*Sig.*
Male	111	38.28	7.789	2.348*	398	.019
Female	289	40.36	7.971			

Note: *p < .05, **p<.01

Table 3 shows that there is a significant difference in mean among male and female students with t= 3.466, p < .05. Findings indicate that female students are more indecisive about careers (M=40. 36, SD=7.971) as compared to male students (M=38. 28, SD=7.789).

DISCUSSION

Career is viewed as a mix of interests of the topics in the sphere of higher education and a way of work a citizen chooses also plays a significant part in his life (Herr et al., 2004). In the analysis of the effects of learning styles, it emerged as an important predictor of career

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indecisiveness in university undergraduates. Individuals with different learning styles will also differ with respect to their learning strategies. The integrative review by Bian (2023) mentions that trait uncertainty, negative thinking, and self-efficacy are better predictors of career indecision than simple types of preference learning, indicating that the future can benefit focusing on cognitive-motivational characteristics rather than a profile based on modality.

This causes them to differ in their decision-making skills based on these learning styles. There is limited research with mixed findings on the topic of career indecisiveness and learning style. Based on the experiential learning inventory developed by Kolb, Farhang et al. (2020) concluded that there is no difference between learning styles of students and career decision making self-efficacy, indicating that traditionally defined learning styles cannot be used across disciplines to predict decisiveness. Various studies have demonstrated that students with different learning orientations are interested in particular kinds of careers.

In addition, the data comparison between career indecisiveness in the first and the final year students indicates that the first year students are more indecisive regarding their career. Taking the right career decision will be a challenging scenario among students (Kazi & Akhlaq, 2017). In the last year however, the proportion who did not show a dominant style grew significantly, indicating a change towards increased cognitive flexibility. The decline of prevalent learning preferences during the observation period emphasizes the flexibility growing among the students and their tendency to combine various learning strategies to adapt to the complicated clinical and academic conditions the students experience.

According to the suggestion of Stead and Watson (2006), students ought to possess information on available careers since ignorance on various careers predisposes the students even more to make improper careers in their future. This wisdom regarding the extent and significance of a field is provided to the final year students because by now they have had increased exposure to their subject of choice. A similar study conducted by Liu et al. (2023) on medical school students in Inner Mongolia (first-fourth year med students) used Felder Silverman Index to determine grade differences. Freshmen had proficient scores in all outcomes: active/reflective and visual/verbal orientation balanced, with sophomores to seniors performing better in visual, sensing, sequential learning dimensions ($p<.05$), pointing at the maturity trend toward structured and detail oriented learning as the students age.

Regarding gender disparities, the result of the present study shows that women are more uncertain of making the right career choices than the men are. In the same way, Siddiquei et al. (2024) surveyed almost 500 Pakistani university students with the Felder-Soloman Index of Learning Styles (ILS) and found that male students had a tendency towards visual-verbal, active-reflective, and sequential-global style preferences, female students were more prone with a sense-intuitive style; there was a statistically significant difference in all four dimensions between the genders. Rabbani et al. (2008) found that Pakistani women are confined as homemaker of the extended family and are supposed to select easy career only to acquire the credits.

This paper focused on the effects of learning styles in making career choices among the students in universities. The findings reveal that learning styles is playing a crucial role in the prediction of career making choices among students. In addition, women are quite indecisive on career choice unlike their male counterparts at the university. The research also indicates that the first year students are uncertain as compared to the final year students.

With the limitations of this study still in mind, several recommendations have been formulated which could be developed in further studies.

- Longitudinal studies can give an explanation concerning the changes that take place concerning the choices of the students.
- The participants were not questioned on their particular areas of study. In further study, it could be quantified in an attempt at making sense of the learning styles that influence careers after examining the various elements of learning styles with certain careers.
- Since the current study has been done only on the students of the public sector university, the future research can encompass both the private sector universities as well to determine the comparison between the two different universities (public and private sector).

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