

Original Research Paper

Career Maturity of Students with Visual Impairment in Relation to their Self Efficacy and Self Advocacy

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Abstract: The study investigated relationship of career maturity with career decision self-efficacy and self-advocacy of the students with visual impairment. Mixed method approach employed for the study. Purposive sampling technique was employed, a sample of 100 students were taken for study. The main finding are: There is a significant relationship between career maturity (competence test) and career decision making self-efficacy of the students with visual impairment. There is a significant relationship between career maturity (self-appraisal, occupational information, goal selection, problem solving) and self-advocacy of the students with visual impairment. There is no significant gender difference on career maturity of students with visual impairment. Career decision making self-efficacy and self-advocacy were found to be the predictors of career maturity (self-appraisal, goal selection, planning) and contribute significantly to career maturity (self-appraisal, goal selection, planning) of students with visual impairment. Career decision making self-efficacy was found the predictors of career maturity (occupational information, problem solving) and contribute significantly to career maturity (occupational information, problem solving) of students with visual impairment. There are various factors such as socioeconomic status, uneducated parents, knowledge of braille etc. which contributed to low career maturity of the students with visual impairment.

Keywords: Career Maturity, Self-Efficacy, Self-Advocacy, Visual Impairment

Introduction

The social organization of any society depends greatly on the career development of individuals. This is assumed that by the end of high school, adolescents have sufficient knowledge about the world of work and they are in a position to make a career choice (Coertse and Schepers, 2004). Individuals with disabilities have a more hard career development process than their peers and are more receptive to vocational identity and career decision-making problems. There are a number of factors that influence the career decision making process for people with disabilities. Individual factors are, gender cultural background, socioeconomic status, self-esteem, self-efficacy (Szymanski and Hershenson, 1998) and disability status. Environmental factors are family involvement, work experiences (Blustein *et al.*, 2000;

Ohler *et al.*, 1996) and decision-making opportunities (Hagner and Salomone, 1989) have been found to affect the career decision-making abilities of individuals with disabilities. Individuals with disabilities should have an understanding of their disabilities and they can advocate for themselves (Mellard and Hazel, 1992; Minskoff, 1994).

The World Health Organization has clearly distinguished the use of three terms: Impairment, disability and handicap. Impairment means, abnormalities of body structure and functions of organ or organ system. Impairment means problems at organ level. Disability considers the results of impairment in terms of functional performance of organs and activity by the individual. Handicap refers to disadvantages faced by the individual as a result of impairments and disabilities; so handicaps reflect the interaction of adjustment of individual with his surroundings (WHO, 1976).

Vision Impairment

Visual handicap is defined in terms of visual sensitivity, ability to see and visual efficiency. Visual ability is the ability of the eye to see distant as well as nearby objects clearly using Snellen chart. Individuals who see the letter 'E' from a 20 feet distance instead of 200 feet are legally blind. Low vision or residual vision children are sighted and their visual sensitivity does not exceed 20/70. These children have coordination and mobility problems. The causes of blindness can be both genetic and environmental. Students with visual impairment have problems in reading, viewing boards, overheads, videos and other visual demonstrations. They have difficulties in getting around the campus as well as find places or materials in classrooms.

Career Maturity

Career maturity can be defined as an individual's readiness to make informed career choices and decisions, which are both, realistic and age-appropriate (Savickas, 1984). Career maturity means knowledge of professional behaviour. Therefore, in career development process career maturity plays an important role in influencing the career decision-making (Creed *et al.*, 2006). Career maturity is an area to which an individual is able to acquire those career developmental tasks which are suitable to the appropriate stage of his/her life (Miles, 2008). Therefore, career maturity can be a useful measure with individuals with disabilities. Because they can perform according to their ability.

Dimensions of Career Maturity

There are two dimensions of career maturity (Crites, 1976):

- **Attitudinal**
- **Cognitive**

Attitudinal

The attitudinal dimension refers to attitudes and emotions of the individual about making a career choice and whether they enable to continue their career choice as they engage in the occupation. Career-related orientation, involvement, planning and exploration have been defined as representing career attitudes or career behaviours (Schimitt-Rodermund and Silbereisen, 1998).

Cognitive

The cognitive dimension refers to individuals' awareness to make a career choice and their understanding in other career possibilities. It consists of information which refers to the knowledge and

competencies required to make career decisions, which include occupational information, self-appraisal and planning (Creed and Patton, 2003). For students with disabilities, the cognitive dimension is significant in their career decision making process. These students face cognitive challenges of selecting a career, finishing college and finding employment.

Career Decision Making Self-Efficacy

According to Taylor and Betz (1983) career decision making self-efficacy is an individual's belief that he or she can successfully complete task indispensable to career decision making. Career decision making self-efficacy is an individual's beliefs that he or she can perform the activities and obligations correctly to make a powerful career decision (Gati and Amir, 2006)

Self-Advocacy

Balcazar *et al.* (1996) defined, "Self-advocacy is a assertion by people with developmental disabilities that they want to be seen as people who have something to offer and skills to share, rather than be seen as people with handicaps or limitations. Self-advocacy influences one's ability to preserve an independent standard of living. It impacts one's achievements within the school and the community. Particularly for students with disabilities, communicating rights and requesting appropriate accommodations have been areas of weakness (Swanson, 2008). Self-Advocacy refers to skills one uses to communicate, express needs and desires or state his or her own interests, to gain access to their needs and rights (Van Reusen *et al.*, 2015).

Rational of the Study

The main idea to pursue the present piece of work is to study career maturity of students with visual impairment in relation to their career decision making self- efficacy and self-advocacy. The selection of an occupation is one of the most important decisions for an adolescent. These days a large number of career options are available to the students, therefore it is a difficult task for the individuals to make a mature choice. Students with visual impairment face many challenges in their career decision making process and in school-to-work transition. They face environmental and behavioral barrier that can impede their achievement of advancement in their career development.

Delimitations

The study under investigation was delimited to the following:

- The study was delimited to special schools of Delhi and Chandigarh only
- The study was delimited to age group from 14-22 years of the students with visual impairment
- The study was further delimited to one type of disability i.e., visual impairment

Objectives

The specific objectives of the study were:

- To study the nature of the variables under study viz. career maturity, career decision making self-efficacy and self-advocacy in the students with visual impairment
- To study the relationship of the career maturity with career decision making self- efficacy of the students with visual impairment
- To study the relationship of the career maturity with self- advocacy of the students with visual impairment
- To find out whether boys and girls with visual impairment exhibit any differences with regards to their career maturity
- To find out the predictors of career maturity from among the independent variable of career decision making self-efficacy and self-advocacy of the students with visual impairment

Hypotheses

Based on above mentioned objectives following hypotheses have been framed:

H_1

- There exists no significant relationship between the sub dimension of career maturity (self-appraisal) and career decision making self-efficacy of students with visual impairment
- There exists no significant relationship between the sub dimension of career maturity (occupational information) and career decision making self-efficacy of students with visual impairment
- There exists no significant relationship between the sub dimension of career maturity (goal selection) and career decision making self-efficacy of students with visual impairment
- There exists no significant relationship between the sub dimension of career maturity (planning) and career decision making self-efficacy of students with visual impairment
- There exists no significant relationship between sub dimension of career maturity (problem solving) and career decision making self-efficacy of students with visual impairment

- There exists no significant relationship between dimension of career maturity (attitude scale) and career decision making self-efficacy of students with visual impairment

H_2

- There exists no significant relationship between sub dimension of career maturity (self-appraisal) and self-advocacy of students with visual impairment
- There exists no significant relationship between sub dimension of career maturity (occupational information) and self-advocacy of students with visual impairment
- There exists no significant relationship between sub dimension of career maturity (goal selection) and self-advocacy of students with visual impairment.
- There exists no significant relationship between the sub dimension of career maturity (planning) and self-advocacy of students with visual impairment.
- There exists no significant relationship between the sub dimension of career maturity (problem solving) and self- advocacy of students with visual impairment
- There exists no significant relationship between the dimension of career maturity (attitude scale) and self-advocacy of students with visual impairment

H_3

- There exists no significant gender difference in the sub dimension of career maturity (self-appraisal) of students with visual impairment
- There exists no significant gender difference in the sub dimension of career maturity (occupational information) of students with visual impairment
- There exists no significant gender difference in the sub dimension of career maturity (goal selection) of students with visual impairment
- There exists no significant gender difference in the sub dimension of career maturity (planning) of students with visual impairment
- There exists no significant gender difference in the sub dimension of career maturity (problem solving) of students with visual impairment
- There exists no significant gender difference in the dimension of career maturity (attitude scale) of students with visual impairment

H_4

- None of the independent variable of career decision making self-efficacy and self-advocacy would contribute significantly in predicting the

career maturity (self-appraisal) independently as well as conjointly among the students with visual impairment

- None of the independent variable of career decision making self-efficacy and self-advocacy would contribute significantly in predicting the career maturity (occupational information) independently as well as conjointly among the students with visual impairment
- None of the independent variable of career decision making self-efficacy and self-advocacy would contribute significantly in predicting the career maturity (goal selection) independently as well as conjointly among the students with visual impairment
- None of the independent variable of career decision making self-efficacy and self-advocacy would contribute significantly in predicting the career maturity (planning) independently as well as conjointly among the students with visual impairment
- None of the independent variable of career decision making self-efficacy and self-advocacy would contribute significantly in predicting the career maturity (problem solving) independently as well as conjointly among the students with visual impairment
- None of the independent variable of career decision making self-efficacy and self-advocacy would contribute significantly in predicting the career maturity (attitude scale) independently as well as conjointly among the students with visual impairment

Method and Procedure

The method of the study was designed to best address the research questions through a combination of quantitative and qualitative approaches in a sequential manner. The mixed methods study in which one method is used to further explore and expand the findings of another (Creswell, 2003; Tashakkori and Teddlie, 1998).

Quantitative Descriptive Phase

The purpose of this phase of the research study to collect quantitative data through survey instruments from the students with visual impairment studied in special schools of Delhi and Chandigarh. Exploratory descriptive survey method was employed in this study. The study was completed in two phases. In first phase, the tool i.e., self-advocacy questionnaire was constructed and validated by the investigator. In the second phase the data was collected, analyzed and interpreted. A sample of 100 respondents (62 boys and 38 girls) was selected using purposive sampling. This sample was consisted of students with visual impairment, studying in different special schools was taken for study. Out of which 50 students from

National confederation of blind (Rohini) and 50 students from National confederation of blind (Chandigarh) was taken for study.

Tool Used

- Career maturity inventory (CMI, Gupta, 1989) was used
- Career decision making self-efficacy- short form (CDSE-SF; Betz, Klein and Taylor, 1996) was used.
- Self-advocacy questionnaire developed by investigator herself

Statistical Techniques Used

For the analysis of data following statistical techniques were used:

- Descriptive statistical techniques such as mean, standard deviation, skewness and kurtosis were worked out to ascertain nature of the distribution of the scores on the dependent variables career maturity and its dimensions and independent variable of career decision making self-efficacy and self-advocacy
- Pearson's Product Method was used to compute correlation of the career maturity and its dimensions with career decision making self-efficacy and self-advocacy
- t-ratio was employed to find out the gender differences on the career maturity and its dimensions
- Step-wise multiple regression analysis was done to find out the predictors (contributors) of criterion variable career maturity and its dimensions from among the independent variables of career decision making self-efficacy and self-advocacy

Qualitative Phase

As qualitative studies depends on collecting data from participants in their natural settings and most of the data are usually without numbers, unstructured text data, a high level of language skills are required. In terms of selecting the students for interviews, the researcher first and foremost used their career maturity score as selection criterion. Researcher selected those students who had low score on career maturity scale. The interview was semi-structured. Each participant was asked the same question during the interview. For the quantitative phase of the study, the sample comprised of 4 students with visual impairment. The data for this study was collected through in-depth interviews and observations. All interviews were conducted at the convenience of the participants. Notes were taken to obtain relevant information.

Analysis and Interpretation of the Results

- Analysis of descriptive statistics for the students with visual impairment
- Correlation of career maturity with career decision making self-efficacy and self-advocacy for the students with visual impairment
- Gender difference for the students with visual impairment on career maturity
- Regression Analysis for students with visual impairment
- Factors contributing to low career maturity of the students with visual impairment

Analysis of Descriptive Statistics for Students with Visual Impairment

The mean, S.D., Sk and Ku of the variables under study i.e., career maturity, career decision making self-efficacy, self-advocacy, in case of students with visual impairment has been given in Table 1.

Career Maturity

The variable of career maturity includes two types of measures i.e., attitude scale and competence test. The attitude scale measures the conative aspects of decision-making. The competence test measures the cognitive variables in choosing a vocation. In all there are five parts of the competence test (Self-appraisal; Occupational information; Goal selection; Planning; Problem solving).

Competence Test

Self-Appraisal

Table 1 reveals that for the students with visual impairment, the mean and S.D. of career maturity (self-appraisal) were 6.47 and 2.01 respectively. The value of mean and S.D. were average. This depicts that students had average ability to accurately appraise their own strengths related to career decision. Sk is found to be -0.59 which is negative and shows that the distribution is negatively skewed. Ku is -0.073 which is lesser than Ku for normal curve and shows that curve is leptokurtic.

Occupational Information

Table 1 reveals that for the students with visual impairment, the mean and S.D. of career maturity (occupational information) were 8.61 and 1.96 respectively. The value of mean and S.D. were average. It reveals that students had average ability to locate various sources of information about college majors and occupations. Sk is found to be -0.71 which is negative and shows that the distribution is negatively skewed. Ku is 1.420 which is greater than Ku for normal curve and shows that curve is platykurtic.

Goal Selection

Table 1 reveals that for the students with visual impairment, the mean and S.D. of career maturity (goal selection) were 8.39 and 2.06 respectively. The mean was found to be high as per norms. It reveals that students had high ability to match one's own characteristics to the demands of careers. Sk was found to be -0.87 which is negative and shows that the distribution is negatively skewed. Ku is 0.706 which is greater than Ku for normal curve and shows that curve is platykurtic.

Planning

Table 1 reveals that for the students with visual impairment, the mean and S.D. of career maturity (planning) were 9.29 and 2.35 respectively. The mean was found to be high as per norms. It depicts that students had high tendency to think about various means, which were necessary to attain desired end. It reveals that Sk is found to be -0.94 which is negative and shows that the distribution is negatively skewed. Ku is 1.325 which is greater than Ku for normal curve and shows that curve is platykurtic.

Problem Solving

Table 1 reveals that for the students with visual impairment, the mean and S.D. of career maturity (problem solving) were 6.33 and 1.80 respectively. The mean was found to be high as per norms. It reveals that students possessed high capability in solving problems that arise in the process of decision making. Sk is found to be -0.38 which is negative and shows that the distribution is negatively skewed. Ku is -0.625 which is lesser than Ku for normal curve and shows that curve is leptokurtic.

Table 1: A summary of descriptive statistics of different variables for students with visual impairment (N = 100)

Variables	Mean	S.D.	Sk	Ku	Remarks
Career maturity					
<i>Competence Test</i>					
Self-appraisal	6.47	2.01	-0.59	-0.073	Average
Occupational information	8.61	1.96	-0.71	1.420	Average
Goal selection	8.39	2.06	-0.87	0.706	High
Planning	9.29	2.35	-0.94	1.325	High
Problem solving	6.33	1.80	-0.38	-0.625	High
<i>Attitude scale</i>	26.72	3.15	-0.09	0.959	Low
Career decision making self- efficacy	94.09	17.31	-0.87	4.090	Average
Self-advocacy	27.85	3.72	-0.72	-.464	Average

Attitude Scale

Table 1 reveals that for the students with visual impairment, the mean and S.D. of career attitude of career maturity were 26.72 and 3.15 respectively. The mean was found to be low as per norms. The low score indicate that students with visual impairment had less developed attitude towards career decisions. Sk is found to be -0.09 which is negative and shows that the distribution is negatively skewed. Ku is 0.959 which is greater than Ku for normal curve and shows that curve is platykurtic.

Career Decision Making Self Efficacy

Table 1 shows that for the students with visual impairment, the value of mean and S.D. of career decision making self-efficacy was 94.09 and 17.31 respectively. The value of mean and S.D. were average. This depicts that students with visual impairment can complete tasks necessary to make career decisions. Sk is found to be -0.87 which is negative and showed that the data is negatively skewed. Ku is 4.090 which is greater than 0.263 ku for normal curve and exhibits that the curve is platykurtic.

Self-Advocacy

Table 1 shows the value of mean and S.D. of self-advocacy for the students with visual impairment, were 27.85 and 3.72 respectively. The value of mean and S.D. were average. This reveals that students with visual impairment understand their disability and were aware of their strengths and weaknesses. Sk is found to be -0.72 which is negative and showed that the data is negatively skewed. Ku is - 0.464 which is lesser than 0.263 ku for normal curve and exhibits that the curve is leptokurtic.

Analysis of Correlation

Correlation of Career Maturity with Career Decision Making Self- Efficacy

Table 2 shows the correlation of dimensions of career maturity (competence and attitude) with the career decision making self-efficacy viz self-appraisal, occupational information, goal selection, planning and

problem solving and attitude scale are 0.443, 0.467, 0.384, 0.432, 0.340, 0.037 respectively. These values 0.443, 0.467, 0.384, 0.432, 0.340 are more than the table value of 0.254 at 0.01 level of significance and hence significant at 0.01 level of significance. No significant correlation is found between dimension of career maturity (attitude scale = 0.037) and career decision making self-efficacy. Thus there exists a significant relationship between dimension of career maturity (competence test) and career decision making self-efficacy.

Correlation of sub Dimension of Career Maturity (Self-Appraisal) with Career Decision Making Self Efficacy

Table 2 shows that the significant relationship is found between sub dimension of career maturity (self-appraisal) and career decision making self-efficacy (0.443) at 0.01 level, for the students with visual impairment. Hence, the hypothesis H₁ (i) there exists no significant relationship between self-appraisal and career decision making self-efficacy for the students with visual impairment, is not accepted. The result shows that self-appraisal contributes towards career decision making self -efficacy. Above result also depicts that students who were more confident in studying their own abilities, talents and potentialities faced lesser difficulties in decision making.

Correlation of sub Dimension of Career Maturity (Occupational Information) with Career Decision Making Self Efficacy

Table 2 reveals that significant relationship is found between sub dimension of career maturity (occupational information) and career decision making self-efficacy (0.467) at 0.01 level, for the students with visual impairment. Hence, the hypothesis H₁ (ii) there exists no significant relationship between sub dimension of career maturity (occupational information) and career decision making self-efficacy for the students with visual impairment, is not accepted. The result reveals that students who were able to collect occupational information from various sources, could progress in the career decision-making process.

Table 2:Correlation matrix of the variable career maturity and career decision making self-efficacy and self-advocacy for students with visual impairment (N = 100)

Variables	Self-appraisal	Occupational information	Goal selection	Planning	Problem solving	Attitude scale	Career decision making self efficacy	Self-advocacy
Career Maturity								
Competence test								
Self-appraisal	1							
Occupational-information	0.619**	1						
Goal selection	0.567**	0.607**	1					
Planning	0.623**	0.695**	0.804**	1				
Problem solving	0.593**	0.535**	0.637**	0.685**	1			
Attitude scale	0.221*	0.168	0.071	0.045	0.134	1		
Career decision making self efficacy	0.443**	0.467**	0.384**	.432**	0.340**	0.037	1	
Self advocacy	0.339**	0.292**	0.302**	0.310**	0.068	0.171	0.279**	1

*. Correlation is significant at the 0.05 level (2-tailed); **. Correlation is significant at the 0.01 level (2-tailed); (Critical value 0.195 at 0.05 level and 0.254 at 0.01 level, df 98)

Correlation of sub dimension of Career Maturity (Goal Selection) with Career Decision Making Self Efficacy

Table 2 shows that significant relationship is found between sub dimension of career maturity (goal selection) and career decision making self-efficacy (0.384) at 0.01 level, for the students with visual impairment. H_1 (iii) there exists no significant relationship between sub dimension of career maturity (goal selection) and career decision making self-efficacy for the students with visual impairment, is not accepted. The result reveals that students were able to select a goal suitable to their capacities in decision making.

Correlation of sub Dimension of Career Maturity (Planning) with Career Decision Making Self Efficacy

Table 2 shows that significant relationship is found between sub dimension of career maturity (planning) and career decision making self-efficacy (0.432) at 0.01 level, for the students with visual impairment. Hence, the hypothesis H_1 (iv) there exists no significant relationship between sub dimension of career maturity (planning) and career decision making self-efficacy for the students with visual impairment, is not accepted. The result demonstrates that students, who were able to make and execute plans, faced less difficulty in career decision making.

Correlation of sub Dimension of Career Maturity (Problem Solving) with Career Decision Making Self Efficacy

Table 2 shows that significant relationship is found between sub dimension of career maturity (problem solving) and career decision making self-efficacy (0.340) at 0.01 level, for the students with visual impairment. Hence, the hypothesis H_1 (v) there exists no significant relationship between career maturity (problem solving) and career decision making self-efficacy for the students with visual impairment, is not accepted. The result depicts that individuals with higher problem-solving skills were more confident in their decision-making ability and career potential and more certain about their educational and career choice.

It is clear from above discussion that out of six dimensions of career maturity correlation is found on five dimensions namely self-appraisal, occupational information, goal selection, planning and problem solving with career decision making self-efficacy for the students with visual impairment. These findings are supported by Barker and Kellen (1998) who found that one of the most important tasks that one undertakes as part of the career decision making process is to collect information about the possible career options that one is interested in. These finding are also supported by Powell and Luzzo (1998) who found that those who had more personal control over

their career decisions had more positive attitudes toward career decision-making and were more career aware.

Correlation of Career Maturity with Self advocacy

The correlation between variables has been presented as under.

Table 2 shows the correlation of self-advocacy and sub dimensions of career maturity viz. self-appraisal, occupational information, goal selection, planning, problem solving and attitude scale are 0.339, 0.292, 0.302, 0.310, 0.068 and 0.171 respectively. These values 0.339, 0.292, 0.302, 0.310 are more than the table value of 0.254 at 0.01 level of significance and hence significant at 0.01 level of significance. No significant relationship is found between problem solving (0.068) sub dimension of career maturity and self-advocacy, attitude (0.171) dimension of career maturity and self-advocacy. Thus, there exists significant relationship between sub dimensions of career maturity i.e., self-appraisal, occupational information, goal selection and planning with self-advocacy.

Correlation of Sub Dimension of Career Maturity (Self-Appraisal) with Self Advocacy

Table 2 shows that significant relationship is found between sub dimension of career maturity (self-appraisal) and self-advocacy (0.339) at 0.01 level, for the students with visual impairment. Hence, the hypothesis H_2 (i) there exists no significant relationship between sub dimension of career maturity (self-appraisal) and self-advocacy for the students with visual impairment, is not accepted. It means self-appraisal contributes towards self-advocacy. The students who were aware about their disability could choose better career for themselves.

Correlation of Sub Dimension of Career Maturity (Occupational Information) with Self Advocacy

Table 2 shows that significant relationship is found between sub dimension of career maturity (occupational information) and self-advocacy (0.0292) at 0.01 level, for the students with visual impairment. Hence, the hypothesis H_2 (ii) there exists no significant relationship between sub dimension of career maturity (occupational information) and self-advocacy for the students with visual impairment, is not accepted. It means that the students with disabilities who can understand their strengths and weaknesses were able to obtain information about various occupations.

Correlation of Sub dimension of Career Maturity (Goal Selection) with Self Advocacy

Table 2 shows that significant relationship is found between sub dimension of career maturity (goal selection) and self-advocacy (0.302) at 0.01 level, for the students with visual impairment. Hence, the hypothesis H_2 (iii) there exists no significant relationship between career

maturity (goal selection) and self-advocacy for the students with visual impairment, is not accepted. The result demonstrates that students who were aware about their strengths, weaknesses and disability rights were able to obtain their goal.

Correlation of Sub Dimension of Career Maturity (Planning) with Self Advocacy

Table 2 shows that significant relationship is found between sub dimension of career maturity (planning) and self-advocacy (0.310) at 0.01 level, for the students with visual impairment. Hence, the hypothesis H₂ (iv) there exists no significant relationship between career maturity (planning) and career decision making self-efficacy for the students with visual impairment, is not accepted. The above result depicts that self-advocacy strategies helped the students to function more independently by identifying their areas of weakness and accessing resources to meet goals.

It is clear from above discussions that out of six dimensions of career maturity, correlation is found on four dimensions namely self-appraisal, occupational information, goal selection, planning with self-advocacy for the students with visual impairment. The finding are supported by Luzzo (1995) that the students with hearing, visual, or physical disabilities were better able to describe the impact of their disability on academic and career development than were students with other types of disabilities. The students with disabilities, who participate in self-advocacy training, can develop individualized career plans.

Gender Differences on Career Maturity for the Students with Visual Impairment

Discussion Based on Table 3

Significance of differences between means of boys and girls on the variable of career maturity along with six sub-variables of CMI was computed by t-ratios with a view to examine the gender differences (Table 4). All mean differences presented in Table 4 are insignificant

between the boys and girls on various dimensions of career maturity, namely, self-appraisal (t = -0.31), occupational information (t = -0.29), goal selection (t = 0.18), planning (t = 0.61), problem solving (t = 0.53), attitude scale (sub test) (t = 0.40).

Regression Analysis for Students with Visual Impairment

Table 4 shows that the F-value for this step is 6.44 which is significant at 0.05 level. This demonstrates that increase in the prediction value after the addition of self-advocacy is significant. In present study career decision making self-efficacy and self-advocacy contributes conjointly as well as independently towards the prediction of career maturity (self-appraisal). Thus the null hypothesis H₄ (i) that none of the independent variable of career decision making self-efficacy and self-advocacy would contribute significantly in predicting the career maturity (self-appraisal) independently as well as conjointly among students with visual impairment, is not accepted.

Table 5 shows that the F-value for this step was 27.38 which is significant at 0.01 level. This demonstrates that career decision making self-efficacy was significantly predictor of criterion variable i.e., career maturity (occupational information) of the students with visual impairment. Thus the null hypothesis H₄ (ii) that none of the independent variable of career decision making self-efficacy and self-advocacy would contribute significantly in predicting the career maturity (occupational information) independently as well as conjointly among students with visual impairment, is not accepted in the present investigation.

From the Table 3 It is clear that out of six dimensions of career maturity, no significant gender difference was observed in case of students with visual impairment. These findings are also supported by Salami (2008) who demonstrated that no significant differences were found between the males and females in their career maturity.

Table 3: Comparison of boys (N = 62) and girls (N = 38) with visual impairment on the variables of career maturity.

Variables	Boys		Girls			t-ratio	
	Mean	S.D.	SE _M	Mean	S.D.		SE _M
Career maturity							
<i>Competence Tes</i>							
Self-appraisal	6.42	2.16	0.276	6.55	1.76	0.286	-0.319
Occupational information	8.56	2.05	0.261	8.68	1.84	0.300	-0.294
Goal selection	8.42	2.01	0.256	8.34	2.17	0.352	0.181
Planning	9.40	2.30	0.292	9.11	2.46	0.401	0.611
Problem solving	6.41	1.68	0.216	6.21	1.98	0.323	0.533
<i>Attitude scale 26.63</i>	3.36	0.427	26.87	2.80	0.454	0-.367	

*Significant at 0.05 level (1.98); **Significant at 0.01 level (2.63)

Table 4: Step-wise multiple regression equation for sub dimension of Career maturity (self-appraisal) for the students with visual impairment (N = 100)

Model	R	R Square	Adjusted R Square	Std. Error of Estimate	Change statistics				
					R square change	F Change	D f1	Df2	Sig. F Change
1	0.443 ^(b)	0.196	0.188	1.818	0.196	23.955**	1	98	.000
2	0.496 ^(c)	0.247	0.231	1.769	0.050	6.447*	1	97	.013

**Significant at 0.01 level; * Significant at 0.05 level; a. (Critical value 3.95 at 0.05 and 6.90 at 0.01 level of df 98); b. Predictor: (constant), CDMSE; c. Predictor: (Constant), CDMSE, SA

Table 5: Step-wise multiple regression equation for sub dimension of career maturity (occupational information) for the students with visual impairment (N = 100)

Model	R	R Square	Adjusted R Square	Std. Error of Estimate	Change statistics				
					R square change	F Change	d f1	d f2	Sig. F Change
1	0.467 ^(b)	0.218	0.210	1.750	0.218	27.381**	1	98	0.000

**Significant at 0.01 level; *Significant at 0.05 level; a. (Critical value 3.95 at 0.05 and 6.90 at 0.01 level of df 98); b. Predictor: (constant), CDMSE

Table 6: Stepwise multiple regression equation for sub dimension of career maturity (goal selection) for the students with visual impairment (N = 100)

Model	R	R Square	Adjusted R Square	Std. Error of Estimate	Change statistics				
					R square change	F Change	d f1	d f2	Sig. F Change
1	0.384 ^(b)	0.147	0.139	1.916	0.147	16.941**	1	98	0.000
2	0.434 ^(c)	0.188	0.172	1.879	0.041	4.910*	1	97	0.029

**Significant at 0.01 level; *Significant at 0.05 level; a. (Critical value 3.95 at 0.05 and 6.90 at 0.01 level of df 98); b. Predictor: (constant), CDMSE; c. Predictor: (Constant), CDMSE, SA

Table 7: Stepwise multiple regression equation for sub dimension of career maturity (planning) for the students with visual impairment (N = 100)

Model	R	R Square	Adjusted R Square	Std. Error of Estimate	Change statistics				
					R square change	F Change	d f1	d f2	Sig. F Change
1	0.432 ^(b)	0.186	0.178	2.138	0.186	22.450**	1	98	0.000
2	0.474 ^(c)	0.225	0.209	2.097	0.039	4.850*	1	97	0.030

**Significant at 0.01 level; *Significant at 0.05 level; a. (Critical value 3.95 at 0.05 and 6.90 at 0.01 level of df 98); b. Predictor: (constant), CDMSE; c. Predictor: (Constant), CDMSE, SA

Table 6 shows that the F-value for this step is 4.910 which is significant at 0.05 level. This demonstrates that increase in the prediction value after the addition of self-advocacy is significant. In present study this career decision making self-efficacy and self-advocacy contributes conjointly as well as independently towards the prediction of career maturity (goal selection). Thus, the null hypothesis H_4 (iii) that none of the independent variable of career decision making self-efficacy and self-advocacy would contribute significantly in predicting the career maturity (goal selection) independently as well as conjointly among students with visual impairment, is not accepted.

Table 7 shows that the F-value for this step is 4.850 which is significant at 0.05 level. This demonstrates that increase in the prediction value after the addition of self-advocacy is significant. The career decision making self-efficacy and self-advocacy contributes conjointly as well as independently towards the prediction of career maturity (planning). Thus, the null hypothesis H_4 (iv) that none of the independent variable of career decision making self-efficacy and self-advocacy would contribute significantly in predicting the career maturity (planning) independently as well as conjointly among students with visual impairment, is not accepted.

Table 8: Step-wise multiple regression equation for sub dimension of career maturity (problem solving) for the students with visual impairment (N = 100)

Model	R	R Square	Adjusted R Square	Std. Error of Estimate	Change statistics				
					R square change	F Change	d f1	d f2	Sig. F Change
1	0.340 ^(b)	0.116	0.107	1.703	0.116	12.708**	1	98	0.001

**Significant at 0.01 level; *Significant at 0.05 level; a. (Critical value 3.95 at 0.05 and 6.90 at 0.01 level of df 98); b. Predictor: (constant), CDMSE

Table 8 shows that the F-value for this step is 12.708 which is significant at 0.01 level. This demonstrates that career decision making self-efficacy is significantly predictor of career maturity (problem solving) of the students with visual impairment. Thus, the null hypothesis H_4 (v) that none of the independent variable of career decision making self-efficacy and self-advocacy would contribute significantly in predicting the career maturity (problem solving) independently as well as conjointly among students with visual impairment, is not accepted.

Factors Contributing to Low Career Maturity of Students with Visual Impairment

It is very difficult to educate a person with visual impairment. This is because an individual with visual impairment faced many challenges varying from participation in social activities, locomotion, education, employment etc. It requires lot of money to educate children with visual impairment than their sighted peers. Unlike normal children who can easily learn so many things merely by observing and imitating others, but the child with visual impairment required help for learning so many concepts, thus required more time to be cared for. It is interesting to know that people with visual impairment have the abilities to learn various skills and these skills are useful for them, if they are properly guided by relevant professionals. With these skills the people with visual impairment can live an independent life. The research questions explored possible factors contributing to low career maturity of the students with visual impairment.

Student-I

Student 1 is 17 years male; his scores on career attitude, self-appraisal, occupational information, goal selection, planning and problem solving were 20, 2, 2, 2, 2, 3. Due to lack of confidence and self-knowledge he could not make decision regarding career choice. Self-knowledge and self-confidence are the primary factors for the students with visual impairment. Self-knowledge means understanding of one's own abilities, character,

feelings, or motivations. The student had uneducated parents. Less educated parents are less likely to be involved in their children's education process. Parents play an important role in their children's career decision making process. Parents are important role models for their children (Morrow, 1995). The student belonged to low socioeconomic status. Parents of low-income families participate less in their children's education process. The student also had poor decision-making and problem solving skills because the student did not have experience of part time employment during their secondary school years. The student was not interested in studies and was not getting good marks in the studies. The student did not have knowledge about various occupations. The student had no knowledge about the braille and computer. He was learning braille now, because earlier he was studying in the normal school. When asked from the student what would be his ideal job? He did not respond confidently. He stated that nobody told him that what he should do. It is very difficult for him to decide about his future, because he did not know what he wants to do".

Student-II

The student- 2 scores on career attitude, self-appraisal, occupational information, goal selection, planning and problem solving were 23, 1, 2, 2, 2, 3. Due to lack of confidence and self-knowledge the student could not make decision regarding career choice. Poor self-knowledge makes it difficult for an individual to engage in the career decision-making process altogether. The student had uneducated parents. Less educated parents are less likely to be involved in their children's education process. The family is the most basic institution in our culture and the primary setting where children learn to interact with their environment. The student belonged to low socioeconomic status family. Low SES students have lower levels of career maturity due to lack of occupational information and employment opportunities; (Kerka, 1998). The student also had poor decision-making and problem solving skills as evident from the score, because he did not have experience of part time employment during his secondary school years. He was less likely to have participated in work activities. The student did not have knowledge about various occupations.

Table 9: Factors contributing to low career maturity of students with visual impairment

Subject	Subject-1	Subject-2	Subject-3	Subject-4
Father education	Under matric	Under matric	Matric	Under matric
Mother education	Under matric	Under matric	Under matric	Under matric
Self- knowledge and self confidence	Not confident and does not know his strengths and weaknesses	Not confident and does not know his strengths and weaknesses	Confident and know about his strength and weaknesses	Not confident and does not know his strengths and weaknesses
Socio-economic status	Low	Low	Middle	Middle
Work experience	No	No	Little knowledge	No
Career awareness	No	No	Little awareness	No
Peer influence	No	Little	Little	Little
Interest in studies	No	No	No	No
Computer competence	No	No	Yes	Yes
Knowledge of Braille	No	No	Yes	Yes
Career attitude	20	23	27	25
Self-appraisal	2	1	3	2
Occupational information	2	2	6	5
Goal selection	2	2	5	4
Planning	2	2	5	3
Problem solving	3	3	4	3

The student did not have knowledge of braille. He was learning braille now. He did not have knowledge of computer. No facilities were available at home. He was not interested in studies and did not get good marks in studies. He stated that he had interest in music. When asked from him he can choose music as a career but he did not respond confidently. He stated that there was no proper guidance provided in the school.

Student-III

The student 3 scores on career attitude, self-appraisal, occupational information, goal selection, planning and problem solving were 25, 3, 6, 5, 5, 4. Student reported that he had not decided about what he would like to do after school. He was not confident about his capabilities. Due to lack of confidence and self- knowledge the student could not make decision regarding career choice. The qualification of his father was matric and he was running his own shop. The student belonged to middle socioeconomic status family. The family is the most basic institution in our culture and the primary setting where children learn to interact with their environment. The student also had poor decision-making and problem solving skills and was less likely to have participated in school activities. This student had little knowledge about various occupations, but he was not aware what kind of job he could do. His father was a shopkeeper, he told that his father often discussed about some occupations, but he had not decided what he would do in the future. The student used braille and had knowledge of computer. He was able to assess the internet in the school but he was not interested in studies. He was getting average marks in his studies. He had interest in music. He stated that normal people think that disabled people cannot do any kind of job.

He was not aware how the subject he learned in the class could be helpful to him in the future (Table 9).

Student-IV

The student- 4 score on career attitude, self-appraisal, occupational information, goal selection, planning and problem solving were 27, 2, 5, 4, 4, 3. Due to lack of confidence and self- knowledge the student could not make decision regarding career choice. The student had less educated parents. Parents maintained an important role in the lives of students with disabilities by encouraging, supporting and understanding them and the issues they face in life. The student had poor decision-making and problem solving skills as evident from the score, because he had less experience of part time employment during his school years. Students with disabilities are less likely to obtain work experiences and therefore do not receive the benefit of having worked. As a result, these students may not have the chance to practice decision-making, problem solving and exploration of different jobs. This student had little knowledge about various occupations. His father was a farmer. He told that his father did not know about various kinds of jobs. He was dependent on school teachers for his studies. The student used braille and had knowledge of computer. He said that he could gather information about some occupations from internet, which were suitable for him but was unable to know how to proceed further.

From the above discussion it reveals that there are various factors which contribute towards the low career maturity of students with visual impairment. Students were not aware about the subjects they had learned in the class could be helpful in the future. Poor self-knowledge regarding one's capabilities, interests or personal traits serve as some of the issues relating to

lack of information. They had limited information about the occupations and what is involved in these occupations as well as various options that were available; and lack of information about the ways in which one can get career information. Parents maintained an important role in the lives of students with disabilities by encouraging, supporting and understanding them and the issues they face in life. Students feel as if they are not supported, are less likely to be engaged in school and have less positive attitude towards their future careers. Lindstrom *et al.* (2007) found that family plays an important role in career decision making process and also found that low socio-economic status has a direct effect on career development and vocational identity. These students depend upon their school teachers for guidance.

Educational Implication of the Study

- Career maturity levels and career decision-making abilities are very important to people with disabilities. Study reveals that there is a relationship between career maturity and career decision making of the students with visual impairment. This encourages the growth of career maturity in the students through assisting them to obtain employments
- Facilitating informed choice for students by guiding them in the discovery of more detailed information about particular occupations, any potential difficulties their disability may cause in particular occupational roles and potential solutions to these difficulties
- Educating students about the responsibilities of workplaces and institutions of higher education and training to provide necessary accommodations.
- Providing assertiveness training to enable disabled students to confidently and appropriately explain their needs and make requests for accommodations, in job interview situations and in everyday interactions with workmates, colleagues, customers, clients and others

Conclusion

The present study investigated relationship of career maturity with self-efficacy and self-advocacy among the students with visual impairment. The results show that there exists significant relationship between dimension of career maturity and career decision making self-efficacy of the students with visual impairment. There exists significant relationship between sub dimensions of career maturity and self-advocacy of students with visual impairment. Significant predictors of sub dimensions of career maturity of students with visual impairment were career decision making self-efficacy and self-advocacy.

There were various factors which contributed to low career maturity of students with various types of disabilities. The study would be useful for teachers and administrators to provide appropriate guidance and counseling to develop self-awareness, to enlarge career awareness and to develop appropriate attitude towards work in the students with disabilities.

Author's Contributions

All authors equally contributed in this work.

Ethics

This article is original and contains unpublished material. The corresponding author confirms that all of the other authors have read and approved the manuscript and there are no ethical issues involved.

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