Career Choice Preferences among Rural and Urban Adolescents in Relation to their Intelligence

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ABSTRACT

The present study investigates the career choice preferences among rural and urban adolescents in relation to their intelligence. The study consisted of 200 students of 10th class randomly drawn from four different schools of Amritsar district. Data was collected with the help of career choice preferences checklist by Bhargava and Bhargava (2004) and intelligence test by Raven, Raven and Court (2000) was used. The data obtained were analyzed statistically with the help of Mean, SD, t-ratio and correlation was used to arrive at the following conclusions: (i) There existed significant difference between the career choice preferences of rural and urban adolescents with respect to mass media and journalism, artistic and designing, science and technology, agriculture, commerce and management, defence, education and law & order. (ii) There existed significant difference between the intelligence of rural and urban adolescents. (iii) There existed significant difference between the dimensions of career choice preferences of adolescent boys and girls. (iv) There existed significant difference between the intelligence of adolescent boys and girls. (v) There existed significant relationship between the dimensions of career choice preferences and intelligence of rural adolescents. (vi) There existed significant relationship between the dimensions of career choice preferences and intelligence of urban adolescents. (vii) There existed significant relationship between the dimensions of career choice preferences and intelligence of adolescent boys. (viii) There existed significant relationship between the dimensions of career choice preferences and intelligence of adolescent girls. (ix) There existed significant and positive relationship between the dimensions of career choice preferences and intelligence of total sample.

Keywords: Investigates, intelligence, significant,

Today, due to advancement in science and technology, India has turned out to be a strong and prosperous global power. In this age of discovery and dream, youth today dreams not only of good future for themselves, rather for a good future for nation as well as entire humanity. In a formative age where globalization and fast scientific and technological development takes place, the youth all over the world are facing many challenges in their career planning and selection to choose the right career in accordance with his or her abilities, potentialities skills, cognitive structuring, interest patterns, value systems and personality dispositions. Future tension can be surpassing if individual has a preparation to overcome it. Career preparedness will help the student

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become more effective and successful in life with this chosen job. Childhood aspiration has a major role on individual's striving force. As they grow older, the more they will want, the more they will strive to get it. But external factors (environment and society) and internal factors (self-crisis and family) change their aspirations in life.

For instance, when a child wants to be a nurse to cure a patient but because of her interest like drawing and painting changes his aspirations. His interest gets more concentrated so she will take a course which is suitable for it. Some graduated high-school students gradually stop in pursuing their college career. Financial sustainability plays a major role in alterations of career life. They need to work in order to sustain their studies, as well as to help be conceptualised as a process of decision-making. It also involves a series of prime factors such as the socio-demographic profile (sex, age, parents' educational attainment, parents' occupation, size of income, and sibling position). Likewise, it will identify the top three expressed career choices, preferences for the career choice such as childhood aspirations, family/relatives, peer/friends, interest and specialisation, values, in-demand jobs, and school counsellor, their anticipated problems encountered and how these problems affect the students in making their career preferences and sibling position. There are a series of developmental tasks that everyone faces during the adolescent years. Noticeable changes in intellectual development take place during adolescence and subsequently career development process take place. Career exploration is important during adolescence as adolescents begin to engage in self-exploration and explore potential career options (Gati & Saka, 2001).

Deciding what to do for a living is a simple choice for some. For others, however, the choice is not so easy. There are several techniques one can utilise to figure out what preferences appeals him/her. Career preferences are free opportunities to select a desired career. It is also decision making in a confusing situation which occurs during the senior year of high school. Most adolescents have an interest in or affinity towards certain career fields or occupation. Such aspirations and preferences are formed early in life and are a product of social and environmental factors which include socio-economic status of family, home and family environment, sex, age, rural and urban background and psychological factors which may include intelligence, personality, achievement, motivation, interest, aptitude, self concept, academic achievement etc.

Intelligence is a general capacity of an individual consciously to adjust his thinking to new requirements. It is the general mental adaptability to new problems and conditions of life. The word intelligence comes from the Latin verb 'intellegere' which means to understand. Intelligence is usually said to involve mental capabilities such as ability to reason, plan, solve problems and think abstractly. Intelligence is the brainpower for learned abilities and the ability to adapt to carry on abstract thinking.

Intelligence is the ability to use optimally limited resources including time to achieve goals (Kurzweil, 2000). Intelligence is part of the internal environment that shows through at the interface between person and external environment as a function of cognitive task demands (Slatter, 2001). Intelligence as mental activity directed toward purposive adaptation to, selection and shaping of, real-world environments relevant to one's life (Sternberg , 2003).

The understanding of vocation is vital for students as it enables them to review their career decisions in the light of their potentialities. For proper guidance in the selection of courses of studies as well as in occupation, intelligence testing plays an important role. If a person enters an occupation which requires intelligence more than what he has, he will find himself unsuitable for the type of work. The same difficulty will occur with an individual whose intelligence is greater than what his/her work requires. She/he faces dissatisfaction and lack of competitive spirit in her/his job. The close relationship of intelligence in vocational choice and satisfaction establishes the importance of intelligence in guidance and education.

Intelligence affects the career interests of adolescents to a great extent. Intelligence is the ability to undertake activities. Students should be guided to choose vocations according to their intelligence. Students can be categorised into three intelligence level- high,

low and average. Earlier studies reveal that the high intelligent children are interested in physical sciences, biological sciences, mathematics etc. They take part in competitive examinations in certain type of vocations like scientists, doctors and Engineers. High intelligence is a necessity to achieve success. While clerks and other vocations like it require average intelligence to achieve success. It has been observed that intelligence has much to do with success or failure in making adjustments in life, choosing vocation and in fact every human activity.

Need and Significance

The selection of career and setting in it is an important task and a source of personal gratification. In the modern age of science and technology, hundreds of vocations have been thrown open to an individual. The choice of a right vocation is becoming difficult these days. Adolescence is the period when a major turn takes place in the life of a student because the career will depend upon the subjects chosen at this level. On the recommendation of National Policy of Education 1986, school curriculum after the 10th class has been diversified into academic and vocational streams. The educational and vocational decisions at this stage pave the way for future decisions to be taken by any individual in the world of work. Any wrong decision of vocational choice due to pressure of family or from indecisiveness on the part of adolescent can block his/her growth and development in future. Therefore, the investigator made an attempt to inquire career choice preferences among rural and urban adolescents in relation to their intelligence.

Objectives

1. To compare the career choice preferences of rural and urban adolescents.
2. To compare intelligence of rural and urban adolescents.
3. To compare the career choice preferences of adolescent boys and girls.
4. To compare the intelligence of adolescent boys and girls.
5. To study the relationship between career choice preferences and intelligence of rural adolescents.
6. To study the relationship between career choice preferences and intelligence of urban adolescents.
7. To study the relationship between career choice preferences and intelligence of adolescent boys.
8. To study the relationship between career choice preferences and intelligence of adolescent girls.
9. To study the relationship between career choice preferences and intelligence of total sample.

Hypotheses

1. There exists no significant difference between the career choice preferences of rural and urban adolescents.
2. There exists no significant difference between the intelligence of rural and urban adolescents.
3. There exists no significant difference between the career choice preferences of adolescent boys and girls.
4. There exists no significant difference between the intelligence of adolescent boys and girls.
5. There exists no significant relationship between career choice preferences and intelligence of rural adolescents.
6. There exists no significant relationship between career choice preferences and intelligence of urban adolescents.
7. There exists no significant relationship between career choice preferences and intelligence of adolescent boys.
8. There exists no significant relationship between career choice preferences and intelligence of adolescent girls.
9. There exists no significant relationship between career choice preferences and intelligence of total sample.

Sample

The sample of present study consists of 200 adolescent boys and girls studying in class 10th drawn from government schools of Amritsar district affiliated to Punjab School Education Board, Mohali. The sample consists of 100 boys and 100 girls which were drawn

out using simple random and purposive sampling techniques. The breakup of school wise distribution of the sample has been given in table 1:

Table 1: School wise distribution of the sample

Sl. No.	Name of the School	Area	Boys	Girls	Total
1.	Khalsa International Public School, Ranjit Avenue, Amritsar	Urban	25	25	50
2.	Shri Guru Harkrishan Public School, G.T. Road, Amritsar	Urban	25	25	50
3.	Government High School, Abdal, Majitha, Amritsar	Rural	25	25	50
4.	Government Senior Secondary School, Ajaibwali Majitha, Amritsar	Rural	25	25	50
	Total		**100**	**100**	**200**

Design

The design of the present study was based on the sample of 200 students of district Amritsar. The variables under consideration were career choice preferences and intelligence. The career choice preference was taken as dependent variable and intelligence was taken as independent variable. In the present study, descriptive method of study was utilized to know about the career choice preference and intelligence of rural and urban adolescents.

Tools Used

1. Choice of Career Checklist by Bhargava and Bhargava (2004) was used.
2. Standard Progressive Matrices by Raven, Raven, and Court (2000) was used.

Procedure

The investigator got the permission from the head of the institution to conduct these tests. After getting the permission, tools were administered to the students. The students were given instructions regarding filling of the responses and were requested to give true response. After collecting the data, scoring was done and the results were compared by using statistical techniques and then interpreted accordingly.

Analysis, Interpretation and Discussion of the Result

The statistical techniques such as mean, standard deviation, correlation and t-test were used in the study. The results are given in the following tables 2, 3, 4, 5, 6, 7, 8, 9 and 10.

Table 2: t-ratio of career choice preferences of rural and urban adolescents

Variables	Rural			Urban			SE_D	t-ratio
	N	Mean	SD	N	Mean	SD		
Mass Media and Journalism	**100**	**5.12**	**3.45**	**100**	**8.35**	**2.46**	**0.42**	**7.69****
Artistic and designing	100	8.10	4.32	100	9.98	5.13	0.67	2.80**
Science and Technology	100	6.37	4.86	100	9.64	2.34	0.54	6.05**
Agriculture	100	9.43	3.11	100	4.26	3.10	0.44	11.75**
Commerce and Management	100	8.84	7.14	100	4.13	3.89	0.57	2.98**
Medicine	100	6.21	3.42	100	6.12	3.23	0.47	0.19
Defence	100	7.87	3.95	100	4.11	2.33	0.46	8.17**
Tourism and Hospitality	100	5.32	4.56	100	6.28	4.15	0.62	1.55
Law and Order	100	9.94	3.12	100	8.24	3.24	0.45	3.77**
Education	100	9.89	2.65	100	7.65	3.78	0.46	4.87**

* Significant at 0.05 level ** Significant at 0.01 level (Critical Value 1.97at 0.05 and 2.60 at 0.01 level, df 198)

The table-2 shows that the mean scores of six dimensions of career choice preferences of rural group were higher than urban group with respect to agriculture, commerce & management, medicine, defence, law & order and education whereas, the mean scores of other four dimensions of career choice preferences of urban group were higher than the rural group, which in comparison to the table value was found significant at 0.01 level of significance. The medicine and tourism & hospitality dimensions were not found significant even at 0.05 level of significance. Hence, the hypothesis H_1: There exists no significant difference between the career choice preferences of rural and urban adolescents, is partly rejected. The result is supported by the finding of Pathaki and Rahman (2013) who revealed that there existed significant difference between rural and urban undergraduate students in certain areas of career choice preferences.

Table 3: t-ratio of intelligence of rural and urban adolescents

Variable	Rural			Urban			SE_D	t-ratio
	N	Mean	SD	N	Mean	SD		
Intelligence	100	38.23	5.67	100	41.44	3.91	0.69	4.65**

** Significant at 0.01 level

(Critical Value 1.97at 0.05 and 2.60 at 0.01 level, df 198)

Table-3 indicates that the mean score of intelligence of rural adolescents is 38.23, which is lower than the corresponding mean scores 41.44 of urban adolescents. The t-value testing the significance of mean difference between intelligence of rural and urban adolescents is 4.65, which in comparison to the table value was found significant at 0.01 level of significance. Hence, the hypothesis H_2: There exists no significant difference between the intelligence of rural and urban adolescents, is rejected. The result indicates that urban adolescents are more intelligent than rural adolescents.

Table 4: t-ratio of career choice preferences of adolescent boys and girls

Variables	Boys			Girls			SE_D	t-ratio
	N	Mean	SD	N	Mean	SD		
Mass Media and Journalism	50	6.62	3.89	50	6.25	3.90	0.78	0.47
Artistic and designing	50	7.36	3.80	50	8.93	4.13	0.79	1.99*
Science and Technology	50	9.42	3.98	50	5.96	4.33	0.83	4.17**
Agriculture	50	7.27	4.23	50	4.60	3.51	0.78	3.42**
Commerce and Management	50	6.97	3.27	50	5.09	3.68	0.70	2.68**
Medicine	50	6.77	4.17	50	5.18	3.55	0.77	2.07*
Defence	50	8.81	3.74	50	4.45	3.47	0.72	6.06**
Tourism and Hospitality	50	6.44	3.42	50	6.28	3.67	0.71	0.22
Law and Order	50	9.88	3.67	50	6.57	4.28	0.80	4.14**
Education	50	8.22	3.71	50	8.85	4.19	0.79	0.80

** Significant at 0.05 level ** Significant at 0.01 level*

(Critical Value 1.98 at 0.05 and 2.63 at 0.01 level, df 98)

Table-4 shows that there was significant difference between the mean scores on adolescent boys and girls with respect to five dimensions of career choice preferences. The science and technology, agriculture, commerce and management, defence and law & order areas were significant at 0.01 level and artistic and

designing and medicine areas were significant at 0.05 level of significance whereas, mass media & journalism, tourism & hospitality and education was not found significant even at 0.05 level of significance. Hence, the hypotheses H_3: There exists no significant difference between the career choice preferences of adolescent boys and girls, is rejected at different dimensions of career choice preferences. The result indicates that boys were more interested in science and technology, agriculture, commerce and management, defence and law & order whereas girls were more interested in artistic and designing and medicine. The result is supported by the study given by Feather and Said (1983), Sara (2010) and Pathaki and Rahman (2013) who observed significant difference in career choice preference of boys and girls in different areas of career.

Table 5: t-ratio of intelligence of adolescent boys and girls

Variable	Boys			Girls			SE_D	t-ratio
	N	Mean	SD	N	Mean	SD		
Intelligence	50	45.36	7.94	50	34.20	12.56	2.10	5.32**

** Significant at 0.01 level
(Critical Value 1.98 at 0.05 and 2.63 at 0.01 level, df 98)

Table-5 indicates that the mean score of intelligence of adolescent boys is 45.36, which is higher than the corresponding mean scores 34.20 of adolescent girls. The t-value testing the significance of mean difference between adolescent boys and girls of intelligence is 5.32, which in comparison to the table value was found significant at 0.01 level. Hence, the hypothesis H_4: There exists no significant difference between the intelligence of adolescent boys and girls, is rejected. The result indicates that adolescent boys are more intelligent than adolescent girls.

Table 6: Relationship between career choice preference and intelligence of rural adolescents

Variable	N	Value of 'r'
Mass Media and Journalism	100	.101
Artistic and designing	100	.123
Science and Technology	100	.011
Agriculture	100	-.167
Commerce and Management	100	.108
Medicine	100	.187
Defence	100	-.150
Tourism and Hospitality	100	-.178
Law and Order	100	.223*
Education	100	.207*

*Significant at 0.05 level
(Critical Value: 0.195 at 0.05 and 0.254 at 0.01, df 98)

Table-6 indicates the correlation between intelligence and the ten dimensions of career choice preferences scores of rural adolescents. The calculated value was found positive and significant at 0.05 level of significance regarding the law & order and education dimensions of career choice preferences, whereas the other eight dimensions were not found significant even at 0.05 level of significance. The result indicates that urban students are more inclined towards law & order and education area. The correlation value is low but negative for agriculture, defence and tourism and hospitality areas which show that increase in intelligence of urban students will lead to decrease in the preference of career in the above mentioned areas. For other areas the correlation value is low but positive which suggests that an increase or decrease in the scores on intelligence corresponds to an increase or decrease in the scores in the various areas of career of rural students. Therefore, the hypothesis H_5: There exists no significant relationship between the career choice preferences and intelligence of rural adolescents, is partially accepted. It is therefore concluded that correlation in law & order and education exists between career preferences and intelligence of rural adolescents.

Table 7: Relationship between career choice preference and intelligence of urban adolescents

Variable	N	Value of 'r'
Mass Media and Journalism	100	.039
Artistic and designing	100	.293**
Science and Technology	100	.321**
Agriculture	100	-.144
Commerce and Management	100	.165
Medicine	100	.091

Defence	100	-.105
Tourism and Hospitality	100	-.151
Law and Order	100	.200*
Education	100	.189

**Significant at 0.05 level ** Significant at 0.01 level*
(Critical Value: 0.195 at 0.05 and 0.254 at 0.01, df 98)

Table-7 reports the correlation between intelligence and the dimensions of career choice preferences scores of urban adolescents, which in comparison to the table value was found significant and positive correlation regarding the artistic & designing and science & technology area was significant at 0.01 level and law & order was significant at 0.05 level, whereas other areas were not found significant even at 0.05 level of significance. This shows that urban intelligent adolescents are more inclined towards artistic & designing and science & technology area. The correlation value is low but negative for agriculture, defence and tourism and hospitality areas which show that increase in intelligence of urban students will lead to decrease in the preference of career choice preference areas. For other areas the correlation value is low but positive which suggests that an increase or decrease in the scores on intelligence corresponds to an increase or decrease in the scores in the various areas of career choice preference areas of urban adolescents. Therefore, the hypothesis H_6: There exists no significant relationship between the career choice preferences and intelligence of urban adolescents, stands partially accepted. It is therefore concluded that correlation in artistic & designing and science and technology areas exists between career choice preferences and intelligence of urban adolescents.

Table 8: Relationship between career choice preference and intelligence of adolescent boys

Variable	N	Value of 'r'
Mass Media and Journalism	100	-.006
Artistic and designing	100	.198*
Science and Technology	100	.147
Agriculture	100	.035
Commerce and Management	100	.113
Medicine	100	.027
Defence	100	.120
Tourism and Hospitality	100	.016
Law and Order	100	.266**
Education	100	.018

*Significant at 0.05 level ** Significant at 0.01 level
(Critical Value: 0.195 at 0.05 and 0.254 at 0.01, df 98)

Table-8 reveals that the correlation between intelligence and the ten dimensions of career choice preferences scores of boys, which in comparison to the table value was found significant and positive correlation regarding the law and order area was significant at 0.01 level and artistic & designing was significant at 0.05 level of significance, whereas other dimensions of career choice preferences were not found significant even at 0.05 level of significance. The result indicates that intelligence level has some relationship with the career choice preferences of boys in law and order and artistic & designing areas. Therefore, the hypothesis H_7: There exists no significant relationship between the career choice preferences and intelligence of adolescent boys, stands partially accepted. It is therefore concluded that positive correlation in law and order and artistic & designing areas exists between career choice preferences and intelligence of boys.

Table 9: Relationship between career preferences areas and intelligence of adolescent girls

Variable	N	Value of 'r'
Mass Media and Journalism	100	.123
Artistic and designing	100	.126
Science and Technology	100	.011
Agriculture	100	-.176
Commerce and Management	100	-.349**
Medicine	100	.109
Defence	100	-.180
Tourism and Hospitality	100	-.183
Law and Order	100	.201*
Education	100	.207*

*Significant at 0.05 level ** Significant at 0.01 level
(Critical Value: 0.195 at 0.05 and 0.254 at 0.01, df 98)

Table-9 reveals that the correlation values between intelligence and the ten dimensions of career choice

preferences scores of girls, which in comparison to the table value was found significant and negative correlation regarding the commerce and management area is significant at 0.01 level of significance and law & order and education are found positive significant at 0.05 level, whereas other dimensions of career choice preferences were not found significant even at 0.05 level of significance. The result indicates that intelligence level has some relationship with the career choice preferences of girls in commerce and management, education and law and order areas. Therefore, the hypothesis H_8: There exists no significant relationship between the career choice preferences and intelligence of adolescent girls, stands partially accepted. It is therefore concluded that negative correlation in agriculture, commerce & management, defence and tourism & hospitality dimensions exists but for other dimensions positive relationship was found between career choice preferences and intelligence.

Table 10: Relationship between career preference areas and intelligence of total sample

Variable	N	Value of 'r'
Mass Media and Journalism	200	.019
Artistic and designing	200	.195**
Science and Technology	200	.141*
Agriculture	200	-.123
Commerce and Management	200	-.111
Medicine	200	.066
Defence	200	.117
Tourism and Hospitality	200	-.109
Law and Order	200	.236**
Education	200	.154*

*Significant at 0.05 level ** Significant at 0.01 level

(Critical Value: 0.138 at 0.05 and 0.181 at 0.01, df 198)

Table-10 indicates that the correlation between intelligence and the ten dimensions of career choice preferences of total sample, which in comparison to the table value was found significant and positive correlation regarding the artistic & designing and law & order area was found significant at 0.01 level and science & technology and education was found significant at 0.05 level of significance, whereas other areas were not found significant even at 0.05 level of significance. Therefore the hypothesis H_9: There exists no significant relationship between the career choice preferences and intelligence of total sample, stands partially accepted. It is therefore concluded that correlation in artistic & designing, science and technology, law & order and education areas exists between career choice preferences and intelligence of all adolescent students.

Findings

1. There existed significant difference between the dimensions of career choice preferences of rural and urban adolescents with respect to mass media and journalism, artistic & designing, science & technology, agriculture, commerce & management, defence, education and law & order.
2. There existed significant difference between the dimensions of intelligence of rural and urban adolescents. The urban adolescents were more intelligent than rural adolescents
3. There existed significant difference between the dimensions of career choice preferences of adolescent boys and girls with respect to science & technology, agriculture, commerce & management, defence and law & order, artistic & designing and medicine areas.
4. There existed significant difference between the intelligence of adolescent boys and girls. It was found that boys were more intelligent than girls.
5. There existed significant relationship between dimensions of career choice preferences and intelligence of rural adolescents.
6. There existed significant relationship between dimensions of career choice preferences and intelligence of urban adolescents.
7. There existed significant relationship between dimensions of career choice preferences and intelligence of adolescent boys.
8. There existed significant relationship between dimensions of career choice preferences and intelligence of adolescent girls.

9. There existed significant relationship between dimensions of career choice preferences and intelligence of total sample.

Conclusion

At present, students who are on the verge to make choices regarding their career are facing many difficulties and most of them end up making wrong choices due to improper guidance at right time. We live in an era where the people who survive are the ones who are the fittest. This also has given a rise to the problem of job frustrations and dissatisfactions. The present study identified the most preferred career areas by high school students and also the correlation between career choice preferences and intelligence is also predicted. This investigation therefore yields a guide for the teachers, parents and school administration to help students in making right career decisions at right time taking into consideration their abilities and interests.

Educational Implications

Education is the totality of learning acquired by individual which is inherited from one generation to another, while career serves as its application. The collaboration of these two fields plays a key role in improving individual's competence and professionalism and serves as their personal achievement. This study is deemed significant to various stakeholders. The educational implications of the study according to its use to various stakeholders are given below:

- *To the Students*: The respondents are the centre of the research because ultimately they develop the awareness of themselves, strength and weaknesses for their career development by continually summarizing and reflecting upon what they are learning from home, school and community. In totality, students are in charge of their own choice.
- *To the Parents*: In this study, parents will realize how important they are as a source of encouragement in which children are free to explore different areas of career preferences. This study will look forward in giving their children an assurance to acquire quality education that would enable them to obtain better job, better income, and brighter future.
- *To the School Administration*: The result of this study will help the school administration in putting up an effective, integrated career information and guidance system that plays a very helpful role in guiding students towards making the best possible career decisions. The school should organize timely guidance and counselling programs by inviting experts from different careers and companies to guide students towards their choice of career.
- *To the Researcher*: The process and outcome of this study will produce a great satisfaction, competence and professionalism to the field. Although the topic of the study is focused on career which belongs to the field known as Industrial Psychology, the purpose is to have a diversity and idea about the field rather than understanding the abnormalities of human behaviour.

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