Research Paper Education

Career Beliefs of Adolescents in Relation to Their Internet Savviness

Dr. Supreet Kaur Assistant Professor, University School of Open Learning, Panjab University, Chandigarh, India.

Navdeep Singh Raji Research Scholar, Department of Education, Panjab University, Chandigarh, India.

ABSTRACT

The investigators conducted this study to address career beliefs of adolescents in relation to their internet savviness. The participants were 720 adolescents (360 boys and 360 girls) who completed career beliefs pattern scale and internet savviness scale. No significant relationship was found between career beliefs and internet savviness of the adolescents. There is a significant relationship between career beliefs and information gathering and social collaboration dimensions of internet savviness of the adolescents. There is significant gender difference on career beliefs and internet savviness of adolescents. Educational implications of the study are that there must be career counseling cell in schools and career beliefs must be brought in the career counseling by the counselor. Special attention should be given to boys as they are more negative towards their career preparation.

KEYWORDS

INTRODUCTION

A career by itself is neutral. However careers are aspects of work that are performed within a social context. Running the course of a career is essentially the result of an intricate psychosocial process. A group of people (society at large) presents a wide variety of needs that demand attention. The dynamics of career development motivates individuals from within this larger group, to develop the expertise to meet one of these needs or specific components of a need in a professional manner (Arulmani, 2012).

Career is a mechanism whereby society utilizes the services of its members to contribute to its well being, progress and development. The larger society in return compensates the individual for delivering a particular service. An individual's career therefore has its being in the dynamic interaction between the garnering of personal gain and the services she renders to society at large (Arulmani, 2012).

Krumboltz (1994) originally used the term 'career beliefs' to describe social cognitions in relation to work and career. Career beliefs are strongly held convictions about the process of career choice and the world of work. These are unreasoned convictions. They may or may not be grounded in facts. Career beliefs were defined as the beliefs students held about the world of work (Krumboltz, 1991). Thoughts, ideas, attitudes, assumptions, beliefs and / or cognitions about the world of work and activities related to career preparation and career development are referred to as career beliefs (Krumboltz, 1994). Career beliefs are conglomerate of attitudes, opinions, convictions that seem to cohere together to create mind-sets that underlie people's orientation to the idea of a career (Arulmani & Nag-Arulmani, 2004). Mahadevan (2002) explore the relationship(s) between acculturation and the career beliefs of international students. A low correlation was found between acculturation levels and career beliefs of the Indian, Chinese, and Korean students. Gender was not an influencing or moderating variable in this relationship. Liu (2003) explored the relationships between career resilience and career beliefs among employees in Taiwan. Career resilience scores were negatively correlated with the total career beliefs scores, which indicated that participants who were higher on career resilience tended to possess fewer irrational career beliefs. Career resilience scores were positively correlated with the belief that one should find the best-fit career and that work is very important in one's life. Painter (2003) indicated that the Adult Attention Deficit Disorders Scale (A-ADDES) did significantly predict dysfunctional career thoughts. Contrary to the preponderance of males in the general population, there are no significant gender differences among the variables assessing the three subtypes of ADHD in this study. Baird's (2006) study on career beliefs of women found, women with less ambitious career goals and more traditional beliefs regarding gender roles complete fewer years of education, which in turn affects their employment. Turner and Ziebel (2011) explored the career beliefs of inner-city adolescents (N = 97). Results identified six types of beliefs: success is related to effort, job satisfaction, interest and liking , flexibility/adaptability , achievement and persistence, and toleration of uncertainty. A majority of these young people believed that their success was not related to their efforts and had beliefs inconsistent with flexibility/adaptability. Dimakakou, Argyropoulou, Drosos and Terzaki (2012) revealed statistically significant relationships between the level of career beliefs and gender and immigrant status. Sangma and Arulmani (2013) show that high school students in this region of Meghalaya obtained the lowest scores as per the norms of the scales used to assess these constructs.

Internet Savvy is a competent internet user and understands more than the average user. Doing something creative, access at home, exchanging images, access speed, age, and access at a friend's house were statistically significant predictors of Internet Savviness (Geyer, 2009). Levin and Arafeh (2003) described an emerging group of technologically elite youth (ages 12–17) as being *Internet-savvy*. Many of these adolescents had been online for five to six years and were technologically fluent. Connecting to the Internet was part of their normal daily routine. They reported using a wide array of online applications and relied heavily on the Internet for school and social activities. This trend of young people vigorously embracing the Internet continues (Lenhart & Madden, 2007). A significant percentage of Internet-savvy adolescents "re-mix" existing content (their own and others) into new and unique

creative products shared with others across the Internet (Lenhart & Madden, 2005; Lenhart & Madden, 2007). The result of these re-creations or "mashups" requires more expertise, skill, and imagination to develop. A wide range of abilities is needed to de-construct, modify, and manipulate a multitude of different media objects (audio, video, text) and programming interfaces into unique creations. Internet-savvy children are young adolescents who are comfortable and confident on the Internet. They use the Internet extensively for personal and school tasks and activities (Geyer, 2009). Small, Moody, Siddarth and Bookheimer (2009) found that the text reading task activated brain regions controlling language, reading, memory, and visual abilities, including left inferior frontal, temporal, posterior cingulate, parietal, and occipital regions, and both the magnitude and the extent of brain activation were similar in the Net Naive and Net Savvy groups. During the Internet search task, the Net Naive group showed an activation pattern similar to that of their text reading task, whereas the Net Savvy group demonstrated significant increases in signal intensity in additional regions controlling decision making, complex reasoning, and vision, including the frontal pole, anterior temporal region, anterior and posterior cingulate, and hippocampus. Internet searching was associated with a more than twofold increase in the extent of activation in the major regional clusters in the Net Savvy group compared with the Net Naive group. Geyer (2012) investigated the construct of Internet-Savviness (IS) exhibited by undergraduate Iraqi students at a four-year university in Iraq. The instrument was re-evaluated and modified slightly to accommodate the new population of Iraqi undergraduate students. A subset of the results showed that although there were significant differences between males and females regarding internet self-efficacy and self-report assessments of their own expertise in using the Internet, females' overall scores on the Internet-Savviness scale was comparable to males. Stordy (2012) explores information management undergraduates' and their teachers' perceptions of being Internet literate, of Internet literacy and their Internet-related practices, with the aim of identifying implications for information departments' pedagogy and curriculum. Study concludes that undergraduates' Internet literacy's, coupled with their perception of their own Internet-related abilities and how they became Internet literate, are potentially at odds with academics' understandings of undergraduates' Internet literacy's and their role in facilitating students' Internet literacy's. This study suggests that unless this divide is bridged, the effective development of undergraduates' Internet literacy's within many information schools and departments may be hindered.

SIGNIFICANCE

Career beliefs can influence clients' career-related aspirations and action in both positive and negative ways. Negative beliefs affect clients' perceptions of themselves and the world of work, increase clients' level of negative emotions associated with making a career decision, and immobilizes clients' action toward their career goals (Sampson, 1996). Negative beliefs can influence clients' actions at any stage of career counselling (Amundson, 1997). Alternatively, positive career beliefs facilitate clients' movement through the career decision-making process, create positive expectations, and contribute to effective problem-solving behaviour (Peterson, Sampson, Reardon & Lenz, J. G. 1996). Clients with positive beliefs are able to apply knowledge about themselves and occupations into realistic career and lifestyle goals, and ultimately engage in career-related behaviours. As the Internet becomes more commonly used in classrooms, opportunities to further explore career activities, tools, and people are more available. Recent studies have found that when web resources were introduced into the classroom, students interacted in more complex tasks, developed greater technical skills, and used more outside information (Hardin & Ziebarth, 1995; Owston, 1997; Rice, McBride, & John, 1998) than before the Internet was available. Thus, web resources provided vast and easily accessible information and human resources that promoted exploration of and interaction with additional information resources. Adolescent may be able to develop more informed self-perceptions of working within a specific career while interacting with web resources, e.g., participating in exploration and feedback processes. These perceptions may in turn influence science career interest (Blustein et al., 1994). The present study endeavours to fill these research gaps and it will provide a framework for understanding the intricate relationship of the variables of internet savviness with career beliefs.

OPERATIONAL DEFINITION OF THE VARIABLES

Career Beliefs: Conglomerate of attitudes, opinions, convictions that seem to cohere together to create mind-sets that underlie people's orientation to the idea of a career (Arulmani & Nag-Arulmani, 2004).

Internet Savviness: Internet-savvy children are young adolescents who are comfortable and confident on the Internet. They are competent internet user and understand more than the average user. They use the Internet extensively for personal and school tasks and activities. Doing something creative; access at home, exchanging images, access speed, age, and access at a friend's house were statistically significant predictors of Internet Savviness (Geyer, 2009).

OBJECTIVES

The objectives for the study are:

- To study the relationship of career beliefs with internet savviness and its dimensions. .
- To find out whether boys and girls exhibit any differences with regards to their career beliefs, internet savviness.

HYPOTHESES

H_1 There exists no significant relationship between career beliefs and internet savviness (information gathering, computer mediated communication, internet self-efficacy, creative self expression, internet fluency and social collaboration) of adolescents.

H_2 No significant gender difference will exist on the variables of career beliefs

H_3 No significant gender difference will exist on the variables of internet savviness and its dimensions.

METHOD

In order to study this relationship, descriptive survey method of investigation coupled with the techniques of differential and correlation analysis was used.

SAMPLE

For collecting the requisite data from the adolescents, a total 18 schools from Jalandhar and Kapurthala district's of Punjab were selected randomly. A total of 720 adolescents (360 male and 360 female) were selected randomly.

TOOLS USED

Career Beliefs Pattern Scale Version 3 by Arulmani (2012) was used.

Internet Savviness Scale by Geyer (2009) was used.

ANALYSIS AND INTERPRETATION

The analysis of the data was done by computing product moment coefficient of correlation and mean, standard deviation, t-ratio has been presented in table 1 and 2.

ANALYSIS OF CORRELATION

The analysis of correlation matrix of career belief and internet savviness for total sample has been given in table 1

Table 1: Correlation Matrix of the Variable Career Belief and Internet Savviness for Total Sample (N=720)

Variable	CBPS	IS	IG	CSE	ISE	CEC	IF	SC
CBPS	1							
IS	-0.059	1						
IG	-0.150**	0.549**	1					
CMC	-0.055	0.6 56**	0.234**	1				
ISE	-0.024	0.639**	0.331**	0.377**	1			
CSE	-0.028	0.578**	0.123**	0.446**	0.238**	1		
IF	-0.007	0.597**	0.196**	0.226**	0.378**	0.177**	1	
SC	-0.089**	0.615**	0.262**	0.327**	0.283**	0.340**	0.343**	1

** Significant at the 0.05 Level ** Significant at the 0.01 Level*

(Critical Value 0.062 at 0.05 and 0.81 at 0.01 level, df 718)

Table 1 shows that the correlation of career beliefs and internet savviness is -0.059. This value is less than table value of 0.062 at 0.05 level of significance and hence is not found to be significant even at 0.05 level of significance. Negative but significant correlation is found between career beliefs and information gathering (-0.150) at 0.01 level and with social collaboration (-0.089) at 0.05 level of significance. No significant correlation is found between career beliefs and computer mediated communication (-0.055), internet self-efficacy (-0.024), creative self expression (-0.028) and internet fluency (-0.007) dimensions of internet savviness. Thus there exists no significant relationship between career beliefs and internet savviness and its dimensions namely computer mediated communication, internet self-efficacy, creative self expression and internet fluency except information gathering and social collaboration.

Hence, the hypothesis H_1: There exists no significant relationship between career beliefs and internet savviness (information gathering, computer mediated communication, internet self-efficacy, creative self expression, internet fluency and social collaboration) of adolescents is accepted for internet savviness and its dimensions i.e. computer mediated communication, internet self-efficacy, creative self expression and internet fluency except information gathering and social collaboration. It means dimensions only two of internet savviness i.e. information gathering and social collaboration contributes towards career beliefs of adolescents.

Adolescents who had ability to use various search engines to find resources and to discriminate and filter accurate information from inaccurate information found on internet and socially collaborate online to perform school work i.e. completion of assignments, exchange and sharing of ideas which deepen learning. All this might leads to decreases in negativity of adolescents about their career beliefs. These adolescents have less negative thoughts about their career preparations and career developments.

DIFFERENTIAL ANALYSIS

The analysis of gender based comparison in case of career beliefs and internet savviness for total sample has been given in table 2.

Table: 2: t ratio between boys and girls of test anxiety, family environment and emotional stability

Variables	Boys			Girls			t-ratio
	Mean	S.D.	SE_M	Mean	S.D.	SE_M	
Career Beliefs Pattern Scale	**134.63**	**30.41**	**1.603**	**118.66**	**30.151**	**1.589**	**7.07****
Internet Savviness	**104.01**	**10.44**	**.550**	**101.14**	**10.823**	**.570**	**3.61****
Information Gathering	20.35	3.777	.199	20.75	3.271	.172	-1.50
Computer Mediated Communication	16.62	2.414	.127	15.92	2.702	.142	3.69**
Internet Self Efficacy	13.94	2.485	.131	13.50	2.579	.136	2.32*
Creative Self-Expression	16.56	2.488	.131	15.80	2.699	.142	3.89**
Internet Fluency	18.43	2.659	.140	17.59	3.132	.165	3.88**
Social Collaboration	18.44	2.339	.123	17.89	2.502	.132	3.07**

Career Beliefs

Table 2 reveals that there is significant difference between boys and girls (t-ratio= 7.07) at 0.01 level on the variable of career beliefs. Also the mean scores of boys (134.63) were higher than mean scores of girls (118.66). It revealed that the boys had more negative beliefs about their career preparations and career development than girls. Hence, the null hypothesis "No significant gender difference will exist on the variables of career beliefs" was not accepted in the present study.

Internet Savviness

On the variable of overall internet savviness a significant difference was observed between boys and girls (t-ratio = 3.61) at 0.01 level. Also the mean scores of boys (104.01) were higher than mean scores of girls (101.14). It revealed that the boys are more comfortable and confident on the internet as compared to girls. Boys use internet extensively for personal and school tasks and activities. Boys are the veteran users of the internet, multitasking their own way across many different applications to communicate with friends, conducting school research and preparing presentations for class.

Information Gathering The calculated t-ratio on information gathering dimension of internet savviness was found to be

1.50 which is not significant even at 0.05 level of confidence. This showed that no significant gender difference was found on the dimension of information gathering**.**

Computer Mediated Communication: On the dimension of computer mediated, significant t-ratio (3.69) at 0.01 level of confidence was found in favor of boys. The mean scores was 16.62 in case of boys and 15.92 in case of girls which showed that boys are better in communicating through various formats i.e. audio, video, instant messaging, e-mails, chat rooms and discussions and tools to exchange the conversation or data between two or more individuals as compared to girls.

Internet Self-Efficacy: Comparing boys and girls on the variable of internet self efficacy, significant t-ratio (2.32) at 0.05 level of confidence was found in favor of boys. The mean score was 13.94 in case of boys and 13.50 in case of girls which showed that boys had more belief about their capabilities to produce a desired level of outcomes in navigating the internet and accessing its resources for personal or school use than girls.

Creative Self Expression: Significant difference was observed between boys and girls on the variable of creative self expression at 0.01 level of confidence favoring boys (3.89). The mean scores for boys and girls were 16.56 and 15.80. This indicates that boys are better in using internet for creative work and personal expression as compared to girls.

Internet Fluency: Comparing boys and girls on the variable of internet self efficacy, significant t-ratio (3.88) at 0.01 level of confidence was found in favor of boy. The mean score was 18.43 in case of boys and 17.59 in case of girls which showed that boys had more knowledge of internet and also possess more skills to navigate the internet and make use of its resources than girls.

Social Collaboration: Significant difference was observed between boys and girls on the variable of social collaboration at 0.01 level of confidence favoring boys (3.07). The mean scores for boys and girls were 18.44 and 17.89. This indicates that boys as compared to girls are more socially collaborate online to perform school work i.e. completion of assignments, exchange of idea which deepen the learning.

Hence, the null hypothesis "No significant gender difference will exist on the variables of internet savviness and its dimensions." was not accepted.

EDUCATIONAL IMPLICATIONS OF THE STUDY

Study revealed that social-cognitive variables such as career beliefs play a vital role in setting the stage for career decision making. The negativity in adolescents towards their career beliefs act as barrier in their way of selecting a career, preventing them from grasping life chances. So to prevent this kind of scenario, there must be a career counseling cell in every school. Bringing career beliefs in the process of career counseling could help the career chooser to realize that how effective career choice are sometimes blocked by the beliefs structures that he or she is unaware of.

Result of the study showed that information gathering and social collaboration dimensions of internet savviness were negatively related with career beliefs of adolescents. So the school must provide good internet services in school and encourage adolescents to collaborate online to perform personal work and school work like working in an online study group to complete the assignments. This will help in lowering the negativity of adolescents towards their career beliefs. Knowledge of the parents should be brushed up regarding the benefits of internet and study online so that parents can give sufficient opportunity to their wards to avail internet at home and encourage their wards to collaborate online. But parents must also keep a check on the miss use of the internet by the adolescents.

REFERENCES

Amundson, N. (1997). Myths, metaphors and moxie: The 3M's of career counseling. Journal of Employment Counseling, 34, 76-84. | | Arulmani, G., & Nag-Arulmani, S. (2004). Career counselling: A handbook. New Delhi: Tata McGraw-Hill. | | Arulmani, G. (2012). Career Belief Patterns Scale (CBPS, Version 3). Bangalore, India: The Promise Foundation. | | Baird, C. (2006). Women's gender beliefs, career goals, career-relevant decisions, and occupational attainment. Paper presented in the annual meeting: American Sociological Association at Montreal, Canada. Retrieved May 27, 2015, from http://citation.allacademic.com/meta/p_mla_apa_research_citation/0/9/7/1/1/p97112_index.html?phpsessid=8ronimvqf66clf17int9hebtp0 | | Blustein, D. L., Pauling, M. L., DeMania, M. E., & Faye, M. (1994). Relation between exploratory and choice factors and decisional progress. Journal of Vocational Behavior, 44, 75-90. | | Dimakakou, D. S., Argyropoulou, K., Drosos, N., & Terzaki, M. (2012). Career beliefs of greek and non-greek vocational education students. Creative Education, 3(7), 1241-1250. | | Geyer, R. W. (2009). Developing the Internet-Savviness Scale: Investigating the relationships between internet use and academically talented middle school youth. Research in Middle Level Education Online, 32(5), 1-20. | | Geyer, R. W. (2011). Internet-savviness of Iraqi undergraduate students. American Academic & Scholarly Research Journal, 4(5). | | Hardin, J., & Ziebarth, J. (1995). Digital technology and its impact on education: The future of networking technologies for learning. Washington, D.C.: U.S. Department of Education. Retrieved on May 27, 2015 from http://www.ed.gov/Technology/Future /hardin.html | | Krumboltz, J. D. (1991). Manual for the Career Beliefs Inventory. Palo Alto, CA: Consulting Psychologists Press. | | Krumboltz, J. D. (1994). The career beliefs inventory. Journal of Counseling and Development, 72, 423-428. | | Lenhart, A., & Madden, M., (2005). Teen content creators and consumers. Retrieved October 12, 2007 from the Pew Internet & American Life Project Web site: http://www.pewinternet.org/pdfs/PIP_Teens_Content_Creation.pdf | | Lenhart, A., & Madden, M. (2007). Social networking websites and teens: An overview. Retrieved May 29th, 2015, from, http://www.pewinternet.org/2007/01/07/social-networking-websites-and-teens/ | | | Levin, D., & Arafeh, S. (2003). The digital disconnect project. Retrieved October 20, 2007, from the Pew Internet & American Life http://www.pewtrusts.com/pdf/vf_pew_internet_schools.pdf | | Liu, Y. C. (2003). Relationships between career resilience and career beliefs of employees in Taiwa. Retrieved September 08, 2014 from http://repository.tamu.edu/bitstream/ handle/1969.1/474/etd-tamu-2003c-2003091022-liu-1.pdf?sequence=1 | | Mahadevan, L. (2002). Relationships between acculturation and career beliefs among international university students from India, China, and Korea (Order No. 3060852). Available from ProQuest Dissertations & Theses A&I. (305440977). Retrieved May 2nd 2015 from http://search.proquest.com/docview/305440977?accountid=28367 | | Owston, R. D. (1997). The world wide web: A technology to enhance teaching and learning? Educational Researcher, 26(2), 27-33. | | Painter, C. A. (2003). The relationship between adults reporting symptoms of attention deficit hyperactivity disorder and dysfunctional career beliefs and job satisfaction (Order No. 3098392). Available from ProQuest Dissertations & Theses A&I. (305327300). Retrieved may 2nd 2015 from http://search.proquest.com/docview/305327300?Acco unted=28367 | | Peterson, G. W., Sampson, J. P., Jr., Reardon, R. C., & Lenz, J. G. (1996). Becoming career problem solvers and decision makers: A cognitive information processing approach. In D. Brown, & L. Brooks (3rd Eds.), Career choice and development (pp. 423-475). San Francisco, CA: Jossey-Bass. | | Rice, J. C., McBride, R. H., & John, D. (1998). Defining a web-based learning environment. Retrieved June 15 2011 from http://www.byu.edu/ipt/workshop/wbi/text.html | | Sangma, M. V. & Arulmani, G. (2013). Career preparation, career beliefs, and academic achievement motivation among high school students in Meghalaya. Indian Journal of Career and Livelihood Planning, 2(1), 37-39. | | Sampson, J. P. (1996). Career thoughts inventory professional manual. Florida: Psychological Assessment Resources Inc. | | Small, G. W., Moody, T. D., Siddarth, P., & Bookheimer, S. Y. (2009). Your brain on Google: patterns of cerebral activation during internet searching. American Association for Geriatric Psychiatry, 17(2), 116-26. | | Stordy, P. (2012). Undergraduates' internet literacies. Retrieved May 19 2015 from https:// www.sheffield.ac.uk/is/staff/stordythesis. | | Turner, S. L., & Ziebel, J. L. C. (2011). The career beliefs of inner-city adolescents. Professional School Counselling, 15(1), 1-14. | | |