

Gender-Role Stereotyping As a Correlate of Career Aspirations among Gifted Senior Secondary School Students

Author Details: Umar, Usman Sani

Department of Educational Foundations, Faculty of Education, Nasarawa State University, Keffi, Nigeria.

Abstract

This study examined gender-role stereotyping as a correlate of career aspirations among gifted senior secondary school students in Niger State, Nigeria, using descriptive survey design and a sample size of 178 senior secondary school two (SSS-II) gifted students through purposive sampling technique. Three instruments were used for data collection, namely: Occupational Checklist (OCL); Personal Attitudes Questionnaire (PAQ) and Attitudes towards Students Scale for Adolescents (ASSA). Findings from the study show that male students were interested in a significantly greater number of careers and they showed greater gender-role flexibility in their career aspirations than their male counterparts. The male students, on the other hand, aspired for careers that were significantly higher in education attainment and prestige level. It is concluded that the strength and direction of the relationships between career aspirations and gender-related personality attributes varied by gender. Based on the findings, recommendations were made among others that; Gifted students should be given relevant resources and opportunities if they are to have equal opportunities in life beyond school.

Keywords: Career aspirations; Gender-role stereotyping; Gifted students; Senior secondary school.

Introduction

Understanding gender-role stereotyping in aspirations requires the consideration of multiple variables that interact in complex ways (Mayange & Umar, 2018). This approach entails recognising the direct and indirect effects of socioeconomic disadvantage on the development of self-concepts as well as on emotional, behavioural and psychosocial functioning. Gender, class, and ethnicity continue to shape socialisation processes as well as access to opportunities and life chances. Recognising the intersections of disadvantages and how they develop over time and in context enables the development of an alternative way of addressing questions about gender-role stereotyping that traditional approaches have not yet resolved (Gautam, 2016). Early experiences in the family and school contexts cumulate to shape self-concepts, choices, and behaviours which in turn become part of the gendered social world that impact and mold individual experiences and perceptions. An integrated effort is needed that addresses the inequalities that occur at different stages of life.

Gender inequality in high-status and high-pay careers such as architecture, medicine, and engineering has generated a lot of concern in understanding how gifted students choose their careers, especially female students. In the past, there was less choice for students in the vocational domain. Factors associated with gender discrimination and societal norms have limited the educational opportunities that were available to girls, especially, their access to male-dominated careers (Hoffman, Gneezy, & List, 2011). The Federal Government of Nigeria, in its National Policy on Education (NPE, 2013) has emphasized that the barriers to career aspirations among students should be reduced and there should be greater acceptance of gender infiltration in career aspirations of students so as to increase female participation in traditionally male-dominated careers.

Despite this development, however, male students entering careers in mathematics and the sciences greatly outnumber female students. For instance, Patten and Parker (2012) have found that the underrepresentation of women in high-pay, high-status professions is related to the continued gender-role stereotyping of careers. Early in life, children learn that caterers are female, while soldiers are male (Freeman, 2015; Jamabo, Enebeli & Ester, 2012)). Researches by Page (2010) and Katherine, (2015) and Erlandson (2014) have observed that limited exposure to students in nontraditional careers limits the career aspirations of gifted students who have the potential to pursue education leading to a prestigious career, but may not perceive it as being within their realm of options. Freeman and Garces-Bascal (2015); Miller and Cummings (2009) found that strong adherence to

gender-role stereotyping in career aspirations is diminishing among gifted students due to social and cultural changes. Researches by Kpanja and Umar (2018); Obura and Ajawo (2012) have shown that students' career aspirations are geared towards gender-role stereotyping, though, few have examined the relationship with the added variable of gifted students. They asserted in order for females to realize their potential, a deeper understanding of the motivation behind their career aspirations and expectations is necessary. With regard to career aspirations, those careers that are the highest in earning potential and prestige are male-dominated, which implies that gifted female students would be more attracted to male dominated careers than their male counterparts would be to female-dominated careers. The study focused on gifted students in the adolescent years because at this stage; they have narrowed down a number of potential careers that they believe are inconsistent with their gender role, their social class, or their intellectual potential. The typical adolescent is likely to have narrowed his or her career options, but not actually selected a career. This narrowing process is important because once certain types of careers have been eliminated, they are not likely to be considered in the future. The first step towards understanding is awareness, which this study aimed to address in terms of sex-typing, education required prestige level and the restrictions that may exist to the career aspirations of gifted students. The gifted students are traditionally identified with the higher-than-average score on an Intelligence Quotient (IQ) test. They are sometimes labeled talented because schools and teachers are unawared of how to appropriately cater for them (Goodluck and Njama-Abang 2011). The gifted learner is thus, characterized by an ability to rapidly acquire new content, advanced reasoning, higher maturity than age peers, and heightened awareness of their surroundings and feelings (Adewole, 2015). The unfortunate fact is that these capabilities are either not noticed, or not fully utilized in the standardized curriculum. They also have special learning needs, which if not met, can lead to frustration, a loss of self-esteem, boredom, laziness, and underachievement (Oluseyi and Olujide, 2014).

Recognizing the gifted students then is the first area where the education system discriminates against this group. If the gifted child is not recognized, he or she quickly becomes bored and disinterested with the content taught because they have an advanced knowledge base compared to their non-gifted colleagues (Awandu, 2014). Thus, what is initially new content for non-gifted students might be only practice material for gifted students. If the gifted students are not identified, they quickly surpass their non-gifted classmates and become accustomed to a relaxed approach to learning, which can create serious learning difficulties when confronted with difficult and complex material in higher studies. The failure to identify the gifted student can further be compounded by disagreement over exactly what constitutes gifted (Awandu, 2014). On the other hand, when the gifted students have been identified and placed into a higher streaming class, there emerges the problem of their self-esteem and self-concept due to the big-fish-little-pond syndrome through comparison with their average-ability peers. Their school self-concept will be lowered due to an assimilation effect when they affiliate themselves with their less able peers. Sometimes, gifted students experience socio-emotional problems that include difficulty with social relationships, isolation from peers, pressures to conform and frustration with everyday life (Mathews, 2016). These feelings can compound the gifted students' future life beyond school which may range from underachievement to depression and more serious disorders. There are many challenges facing the gifted students, as well as their teachers.

The main issue is that they are different from their non-gifted peers, and need to be treated and taught using separate, often accelerated, methodology and pedagogy. Teachers of gifted students, therefore, need to create a quasi-professional academic relationship with their students because they are sometimes dependent upon such teachers for the provision of appropriate academic challenges. Gifted students, by virtue of their advanced intellectual capabilities, maybe even more dependent upon the teacher to provide for their specific academic needs. Taylor (2016) reports that there are many options available to gifted students to explore social interaction with age and intellectual peers, as well as possibly finding mentors. She states that the broad spectrum of intellectual, academic and social experience required by the gifted student can only be achieved through the coordinated efforts of the family, the school, and supplemental (gifted and talented) programs. The tendency for

gifted students to display their innate acumen can be combated through teaching study skills and academic planning in gifted and talented programmes alongside relevant course contents (Omede, 2016; Phyllis, 2013). Providing gifted students with the opportunity to explore further study or career options after school may give them a sense of direction (Goodluck and Njama-Abang (2011).

Research Questions

This study generally aimed at investigating gender-role stereotyping as a correlate of career aspirations among gifted senior secondary school students. Specifically, it answered the following research questions:

- i. Do gifted students differ in the sex typing associated with the careers they aspire for?
- ii. Do gifted students differ with regard to gender-related personality attributes?

Research Hypotheses

The following research hypotheses were tested at $\alpha = 0.05$ level of significance:

- i. There is no significant difference between the sex typing of the gifted students and the careers they aspire for;
- ii. Gender-related personality attributes do not significantly differ among the gifted students.

Methodology

The study was a descriptive survey design conducted in Niger State, Nigeria. With purposive sampling technique, a sample size of 178 gifted students (126 male and 52 female) in their senior secondary school two SSSII level was arrived at. The average age of the students was 18 years. At the time of data collection, the students were enrolled in the gifted program in the State where data was collected. With the permission of the school management, the students provided complete data on all of the required variables. Most of the students were from families in the rural and urban setting of Nigeria.

The researcher employed three instruments for the study, namely: Occupational Checklist (OCL); Personal Attributes Questionnaire (PAQ) and Attitudes towards Students Scale for Adolescents (ASSA). The OCL measured the students' interest in careers that were traditional, neutral or nontraditional by selecting either "Might select" or "Would not select" for each career in the instrument. The instrument also required varying levels of educational attainment that were easily recognized by the students and were associated with the six career groupings identified by Holland (1985) occupational typology, namely: Realistic; Investigative; Social; Conventional; Enterprising and Artistic. They were required to select "Might select" or "Would not select" for each of the 25 careers on the list. Higher scores were associated with more male-dominated career aspirations, while lower ones were associated with more female-dominated career aspirations.

The PAQ was used to assess students' self-perceptions of desirable instrumental characteristics such as stereotypically-masculine and expressive characteristics such as stereotypically-feminine) characteristics. It contains three scales of eight items each: a masculinity scale (measuring self-perceptions of instrumental characteristics that are considered desirable for both genders; a femininity scale (measuring self-perceptions of expressive characteristics that are considered desirable for both genders); and a masculinity-femininity (m-f) scale (measuring self-perceptions of a combination of instrumental and expressive characteristics that are considered more desirable in one gender than the other). For each item, students rated themselves on a scale of 0 "Not at all like me" to 4 "very much like me." Items on the m and m-f scales were scored in "masculine direction" of the extreme "masculine" response, which is scored 4, while items on the f-scale were scored in the "feminine direction" of the extreme "feminine" response scored 4. To determine the similarity between genders, analyses of all demographic variables were conducted. Univariate F-tests were performed on all continuous variables, while chi-square analyses were performed on all the other variables using $p < .05$ as the alpha level.

The ASSA consisted of 10 items which measured students' attitudes toward gender roles in career aspiration, where higher scores were associated with more liberal attitudes.

Results

The answers to research questions one and two, are provided in Table I

Table 1: Means and Standard Deviation of the Dependent Variables by Gender

Variable	Male		Female		Comparison of Gender		
	Mean	SD	Mean	SD	F	P	d
OCL Number of careers ticked “Might select”	17.47	7.40	14.53	6.52	7.56	0.0016	0.32
PAQ (m)	17.43	3.21	17.15	3.56	0.31	0.4172	0.06
(f)	19.79	3.25	16.98	3.76	28.46	0.00007	0.64
ASSA	2.07	0.22	1.71	0.40	57.83	0.00007	0.92
Neutral	10.89	5.98	11.28	6.37	0.17	0.5026	0.05

From Table 1:

i. Several differences emerged between groups on the OCL. Female respondents expressed interest in “Might select” with a significantly greater number of careers than male respondents, $F=7.56$, $p < 0.0016$. Girls expressed interest in a mean of 14.53 of the 25 careers, whereas boys expressed interest in a mean of 17.47 of the 25 careers. Boys scored significantly higher on Sex Type, indicating that they were more likely than girls to choose occupations that are male dominated, $F(1, 225) = 176.81$, $p < 0.0001$.

ii. On the PAQ, no significant differences emerged between female and male respondents on the Masculinity (M) scale, $F= 0.31$, $p < .4172$ while, female respondents scored significantly higher than their male counterparts on the Femininity (F) scale, $F= 28.46$, $p < 0.0007$. This shows that, while female and male respondents perceived themselves as possessing similar levels of instrumental characteristics, the female perceived themselves as possessing significantly higher levels of expressive characteristics.

iii. On the ASSA, female respondents scored significantly higher than boys, $F=57.83$, $p < 0.0007$, suggesting that female respondents hold significantly more liberal attitudes than the male respondents toward the rights and roles of girls in society.

Hypothesis One: In order to test hypothesis one which states: There is no significant difference between the sex typing of the gifted students and the careers they aspire for, multivariate analysis of variance (MANOVA) was conducted using gender as the independent variable. The results are shown in Table 2.

Table 2: Correlation between OCL and other dependent variables

Variable	PAQ		ASSA				
	Male	Female	Work	Mastery	EPU	Competitiveness	Style
Gender							
Male	0.29	-0.02	0.20	0.35	0.20	-0.08	0.10
Female	0.02	-0.27	-0.11	0.03	0.06	-0.10	-0.02
Prestige							
Male	0.15	0.10	0.23	0.31	0.14	-0.07	0.07
Female	-0.02	0.07	0.11	0.15	0.00	-0.12	0.12
Educ. Attainment							
Male	0.14	0.07	0.25	0.31	0.10	-0.05	0.007
Female	-0.03	0.04	0.13	0.13	-0.008	-0.13	0.13

Similarly, in order to further examine the specific variables on which the groups differed, post hoc t-tests using the Tukey Method were conducted. Results of the post-hoc Tukey tests are contained in Table 2. Responses were examined for the female and male respondents separately to ascertain whether there were any differences in the relationships among the variables based on gender. The results showed the omnibus F-value of the MANOVA was significant, $F=29.66$, $p < .0001$ thus, rejecting the hypothesis. This indicates there is a significant difference between gender on the students’ career aspirations.

Hypothesis Two: Gender-related personality attribute do not significantly differ among the gifted students. In order to test hypothesis 2, the Pearson Product Moment Correlation Coefficient was used. The results as demonstrated in Table 2 show that for female respondents, there was a moderate positive correlation between the OCL Gender score and the PAQ M scale ($r = 0.29$) and the Mastery scale of the ASSA showed moderate positive correlations with all three scales of the OCL ($r = 0.35$ for Sex Type, $r = 0.31$ for Education Level, and r

= 0.31 for Prestige). The ASSA also showed a moderate positive correlation with the OCL Prestige score ($r = 0.25$). The remainder of the scales showed low-level correlations with the three scales of the OCL. The correlational findings for male respondents were different were, only one moderate to strong correlation was found among the scales. The OCL Sex Type score showed a moderate negative correlation with the PAQ F scale ($r = -0.02$).

Discussion

Findings from this study showed some important differences between gifted senior secondary school students with regard to gender-role stereotyping and career aspirations. These results are consistent with the findings of (Page, 2010; Swicord, 2010), which found that gifted girls show more gender-role flexibility in their career aspirations than do their male counterparts. The findings also indicated that, among the careers listed, female students perceived a wider range of options open to them than male students. It is likely that girls perceived male-dominated, female-dominated, and balanced careers to be within their aspirations and vice versa. Female students scored significantly lower than male students on this particular scale. It seems that males' selections were focused more on the male-dominated and balanced careers. Male students had significantly higher education attainment and prestige scores compared to female students on the OCL, which also indicates that female students were interested in careers that required considerable education and were high in prestige, though not to a similar degree to male students'. It is further evidenced by the findings that female students' overall scores were lower due to the fact that they expressed greater interest than boys in more female-dominated professions.

Both genders in this study were similar in their perceptions of the degree to which they possess masculine (or instrumental) traits though, female students perceived themselves as possessing significantly higher levels of feminine traits than their male counterparts (Kpanja & Umar, 2018; Mendez & Crawford, 2002) It was found that sex type of careers for both genders was the level of self-perceived opposite-sex characteristics. For girls, the correlation between the Femininity scale of the PAQ and Sex Type score was -0.02 , indicating that there was negative relationship between these two variables which, cannot warrant a conclusion that female students who perceive themselves as possessing higher levels of feminine traits are attracted to more female-dominated careers because they are independent of sex type of the careers to which they aspire. These findings demonstrate the important role that self-perceptions of opposite-sex gender-related personality attributes play in students' career aspirations where, female students are more attracted to female-dominated careers than boys, while boys are more attracted to male-dominated careers than girls.

Conclusion

In conclusion, this study showed that gifted female students were very liberal in their attitudes with little variability in their responses. The results also showed that male gifted senior secondary school students continue to aspire for careers that are higher in education required and prestige than their female counterparts. This could mainly be due to the fact that the male students limit their aspirations to those careers that are male-dominated and with high prestige, while their female counterparts express interest in a wider range of careers that include both male dominated and female-dominated ones.

Recommendations

The findings of this study warrant the following recommendations:

- i. Educators should nurture traits such as assertiveness, confidence, mastery orientation in gifted female students that are related to the development of nontraditional occupational interests;
- ii. Counsellors should encourage gifted male students that are attracted to occupations that require high levels of education and are high in prestige to broaden their scope of career aspirations;
- iii. Male gifted students who see themselves as having more expressive traits such as kindness, understanding should be guided by parents to select careers that have nontraditional gender-role stereotyping;
- iv. Gifted students should be given relevant resources and opportunities if they are to have equal opportunities in life beyond school.

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