

Conference Paper

The Aspiration of Departement in College by Gender Tendency

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Abstract

Interest in this research arises from one of the things that sometimes escape the attention, namely the gender tendency toward a major in college. This study used final teenage data at first year students at Yogyakarta State University to see how gender differences can represent aspirations for science and social-humaniora majors. Data were collected using a scale. Scale was distributed to 425 respondents by sampling *propotioned cluster random sampling*. Using the survey method we found that men dominate in the exact plane of about 62.5% and women about 37.4%. The opposite is shown in the non-exact plane dominated by women with a percentage of about 80.4% and about 19.5% of males. This difference is also supported by other factors such as the importance of achievement beliefs in the department, and gender stereotypes in the community that are still inherent. This research is expected to contribute to the literature on career development and can form the basis of the formulation of career guidance programs that can include attention to gender differences.

Keywords: department in college; gender; late adolescence; identity career status.

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1. Introduction

This research focuses on teen career aspirations in this case first year students based on gender. Pandia (in Yusuf, & Daharnis, 2013) argues that career aspirations are one of the processes in career development, in this case adolescents have to make career decisions that they want to choose, and plan career paths which will be followed. After a person has a career orientation, he will make further plans regarding his career, which relate to the desire to excel and achieve a high position in the job. So that in this case the teenagers then choose the department that suits them to achieve the career they want.

Gender differences in Indonesia at the moment are still one of the most discussed topics. Also included in career problems, not a few also from our teenagers who consider gender in choosing majors at universities as part of their career development process. This, as explained in the Riegle-Crumb, Moore, & Ramos-wada (2013) study, deals with

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differences in career aspirations that occur in gender for the exact and non-exact fields. In addition Matlin (in Santrock, 2014) says because women have been socialized to adopt a care role rather than a career or achieve more roles than men do, some women have limited their career choices to gender stereotyped careers. Women and men also make different choices based on experience and tendencies in choosing opportunities (Tracey, Robbins, & Hofsess, 2005).

This is of particular concern especially for late adolescents who want to continue their education to a higher level. Inequality in proportion between women and men in a department, can result in lack or absence of experts in a particular field. Whereas there are fields of work that require women and vice versa, but because gender stereotypes that develop in society make this difficult to achieve. Therefore this study will look at how the aspirational conditions of the department are based on gender trends in late adolescents as well as suggestions for services that can be given to this issue.

1.1. The structure

Final adolescence as one of the phases towards adulthood faces various challenges. Especially those who are in the current era of globalization, where competition is increasingly competitive. This has an impact on one of their development tasks, namely with regard to careers. It is not easy to reach the career we want in the current era of globalization where teenagers not only compete with other teenagers but also with increasingly sophisticated technology. Howard & Galambos (2011) explained that there was confusion in work, education, college, cultural differences during high school and college students during the transition from adolescence to adulthood. The social environment changes that occur during adolescence also influence the increasing social sensitivity that affects adolescent behavior (Blakemore & Mills, 2014). Confusion about their careers, the uncertainty about the future of the department they are currently living in can result in these teenagers not being serious about it. Such teenagers will easily falter with their choices, not stand firm, and poor academic performance.

Gender is one of the factors in selecting majors in adolescents who want to continue to higher education In the Indonesian context gender aspirations for these majors are rarely discussed at guidance services in schools. Even if we look deeper, this is important because it will provide young people with new knowledge regarding the department they will choose when continuing their tertiary education. Various studies supporting gender differences that occur in departmental elections also influence the identity status of adolescents. Gender trends in one of the choices of majors in higher education

are also based on the status of their identity. Men tend to focus on self-achievement efforts, while women are more dependent on their relationships with others (Thorne & Michaelieu, 1996). In addition, young women who tend to be close to the mother figure will have more confidence in career choices that are appropriate to their abilities (Patel, Salahuddin, & O'Brien, 2008). The results of Wang's research, Eccles, & Kenny (2013) also show important findings that groups with high mathematical and verbal abilities include more women than men. This causes teenage girls to have broader career choices, both in the fields of science, technology, engineering and mathematics (Wang, Eccles, & Kenny, 2013). Thus the gender aspirations of the desired majors have implications for the career identity status they have.

This research is limited to the results of differences between career identity status in the exact and non-exact majors seen from their gender aspirations. The hypothesis is that there are differences between exact and non-exact career identity status in terms of gender. This research is expected to be one of its own considerations in the field of career guidance in the world of guidance and counseling, as well as the basis for determining the service program that will be provided relating to the sustainability of adolescent education in the future.

1.1.1. Reference citations

This article is divided into sections as follows: Part 1 is an opening, we explain about the problems encountered, the interest in the issue, and the justification for the problem. In section 2 we present a literature review that supports our research and based on previous research. Part 3 describes the method used. Sections 4 & 5 contain the results and conclusions obtained.

2. Literature Review

Blakemore & Mills (2014) said that "Adolescence is a period of formative biological and social transition. Social cognitive processes involved in navigating are increasingly complex and intimate relationships continue to develop throughout adolescence ". Adolescence is also often defined as the period between the beginning of puberty and the achievement of relative independence. Therefore the beginning of adolescence is largely determined by biological events, while the end of adolescence is often socially defined. Adolescents at this time go through a sensitive period to adapt to one's social environment. Changes in social environments that occur during adolescence

may interact with improving executive functions and increasing social sensitivity to influence a number of teenage behaviors. Then the development of adolescents in this period begins with cognitive, physical, and social changes that occur at the beginning of puberty (Blakemore & Mills, 2014).

During the transition process from adolescence to adulthood, various changes must be faced, including starting to evaluate self-identity and be faced with various moral and spiritual challenges, which are common in most teenagers. Age developments add to the demands and stress that adolescents increasingly face. For example, finding jobs in increasingly competitive conditions, developing good relationships with others, and adapting to technology all provide considerable pressure for adolescents (Geldard, 2009). When adolescents start entering college they will determine the choice of department that suits them. Gender factors become one of the considerations in determining these majors. Research by Morgan, Gelbgiser, & Weeden (2013) found gender differences in the association between work plans and the main selection of higher education, as well as perseverance in the field of physics (Hazari, Sonnert, Sadler, & Shanahan, 2010).

Other research also involves gender in determining career interests. During high school, girls usually receive better grades than boys in math and science classes, but boys tend to outperform girls on standardized tests in these subjects (Priess, Lindberg, & Hyde, 2013). This gender difference is increasingly evident when a person will consider the achievement of education and employment in a particular field. For example, among doctorates recently given in the United States, women only contributed 15% in physics, 20% in computer science, and 18% in engineering where women were underrepresented in these fields (NSF in Robnett & Leaper, 2013). Zafar (2013) in his study explained that women are less likely to take majors in fields such as engineering not because they lack confidence in their academic abilities, low self-confidence, or believe wage discrimination is in the labor market. Instead, it was because they believed that they would not enjoy studying in engineering. Based on this, we can conclude that gender has an influence on the selection of majors currently underway, some research is conducted abroad. So our research wants to see how this is in Indonesia.

3. Material & Methodology

3.1. Data

The data in this research were collected using a scale and questionnaire regarding career identity status with a sample size of 425 UNY first year students in the academic year 2017/2018.

3.2. Method

The research method uses a survey method. The content validity carried out by the experts was ended by revising the research instrument so that in terms of the instrument content was valid. The instrument in this study used a sample of 300 students with an explanatory factor analysis technique. The results of scale validity are divided into two aspects of exploration techniques ($0.776 > 0.05$) and commitment ($0.812 > 0.05$), which means that the scale is worth using. Scale reliability is $0.872 > 0.0113$.

4. Results and Discussion

4.1. Result

The results of hypothesis testing using Mann-Whitney found the results of mean rank scores on gender in two aspects of exploration and student commitment in exact / non-exact majors as follows:

The results of the Mann-Whitney test found that the mean rank score of the exact student exploration level was 211.24, and the non-exact students were 213.85. This difference is not significant because the Z value is -0.206 and the significance value is greater than 0.05, which is 0.837. This data shows that empirically there is no significant difference in the level of exploration between exact and non-exact majors.

The results of the Mann-Whitney test found the results of the mean rank score of the level of commitment of students in the exact department was 210.05, and the non-exact students were 214.44. This difference is not significant because the Z value is -0.346 and the significance value is greater than 0.05, which is 0.729. This data shows that empirically there is no significant difference in the level of commitment between exact and non-exact majors.

TABLE 1: Mann Whitney Test Results differences in exploration activities and commitment to gender (male and female) exact / non-exact majors.

Ranks				
	Gender	N	Mean Rank	Sum of Ranks
Toteks	1	143	218.24	31208.00
	2	282	210.34	59317.00
	Total	425		
Totkom	1	143	228.23	32637.50
	2	282	205.27	57887.50
	Total	425		

	toteks	totkom
Mann-Whitney U	1.941E4	1.798E4
Wilcoxon W	5.932E4	5.789E4
Z-	628	-1.823
Asymp. Sig. (2-tailed)	.530	.068
a. Variable Grouping: Gender		

4.2. Discussion

The findings on the results of this hypothesis test are not in line with the research conducted by Perez, T., Cromley, JG, & Kaplan, A. (2014: 315) which states that there is a relationship between department and career identity status involving the development of explored self-identity positively related to students' beliefs about their competencies. In another study explained that majors in students might give a sense of meaning to their lives, which can strengthen the correlation of life meanings and majors that have been found (Dik, B. J., Sargent, A. M., & Steger, M. F., 2008: 23-41). The findings made by Dik, BJ, Sargent, AM, & Steger, M.F also explain the integration of majors in students who are larger and have a higher level of career calling (Duffy, RD, & Sedlacek, WE, 2010: 27- 41). But the difference in the results of this study is possible because the exact majors are not higher than the non-exact majors and vice versa.

Referring back to the changing times, people no longer see only in terms of departments that are suitable for a particular gender, but more in the direction they are interested in. This is corroborated by Montgomery's research (in Kroger, 2007: 110) which states that currently the role of lectures is more as an individual development facility towards adulthood. It is the self-confidence of each individual that makes his career identity status achieve (Perez et al., 2014: 314) both in exact and non-exact majors. The absence of gender differences in the exact exact department was also

suspected because of a shift in gender values and stereotypes. In the past, women tended to be passive in exploring their careers (Matlin in Santrock, 2014: 394-395) but in this millennial era women also actively explored and developed commitments to careers that were only used for men (Richardson & Schaeff, 2013 in Santrock, 2014: 396). This is evidenced by research showing the similarity in academic skills as an effort to achieve gender equality (Meece & Askew, 2012; Watt, 2008; Watt & Eccles, 2008; in Santrock, 2014: 176). The results of this study were also related to the results of the interviews conducted, the educational environment did not have a significant impact because some respondents stated that parents supported them when choosing whatever direction they were interested in. Some respondents also stated that he and his family did not question the department he was interested in without being tied to gender values and stereotypes. While Kim in his research proposed to develop efforts to change the perceptions of female students to broaden their picture of their future careers in the STEM environment.

5. Conclusion

The implications of the findings of the hypothesis test results above, potentially important for the development of theories relating to gender and its relationship with majors. The choice of majors for students who are currently experiencing a shift in value from the tendency of majors for one gender to be more open to male and female gender. This research is also expected to be a benchmark for service programs that might be given in relation to the department that was started to be designed since high school. The services provided to design majors going forward are also expected to pay more attention to the development of an era or era which is certainly dynamic, factors related to gender equality, and of course the individual internal factors themselves.

The results of this study also have limitations, namely the suspicion of weakness in the process of data reduction in categorization that simplifies the various complexities of forming individual identities (Adam & Archer in Suwarjo, 2000: 96).

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