

Students' Performance in the Indonesian National Examination and Career Choice among the First Year Students in Non-Religious Affiliated Universities

Suci Fitriani

Graduate student, College of Education,
Central Luzon State University, Science City of Muñoz, Nueva Ecija, the Philippines
sucifitriani030@gmail.com

Florante P. Ibarra

College of Education, Central Luzon State University,
Science City of Muñoz, Nueva Ecija, the Philippines
maestrorandz@yahoo.com

Abstract

This research study investigated the role of the four components of the Indonesian National Examination to students' career choice. Around 310 respondents participated in the study using their overall scores in the National Examination. Anchored in Holland's (1997) RIASEC Theory, a quantitative method was employed to gather data using a research instrument tool. Analysis of data included descriptive statistics and Spearman's product moment correlation using Statistical Package for Social Science (SPSS) version 20. Findings of the study revealed that there was significant difference in the national examination between high and low performing students and their career choice and there was a significant relationship between socio-demographic profile, four components of Indonesian National Examination and Indonesian students' career choice. Results mostly suggest that students with high scores in the National examination tend to choose numeric courses in academics.

Keywords: National examination, RIASEC theory, students' career choice

Introduction

Students' performance in the Indonesian national examination plays vital role in choosing one's career path. Thus, education is one of the fundamental priorities in national development. The Indonesian government continuously seeks to improve the quality of its education. In order to create better education, all of the aspects of education must be improved. The aspects include teacher quality, teaching method effectiveness, students' motivation and educational policy. One of the educational policies, which has become the spotlight since 2005 in Education circle is the national examination implementation (Zubaidi & Novitasari as cited in Sutari, 2017). It is clear that national examination is still a controversy among academicians and Indonesian public. Since its first implementation, a steady debate over the national examination practice in Indonesia continues especially that the National Examination is considered as a high-stake test, which means National Examination is the basis for students to graduate in any level of school (Saukah, 2015). Some parties oppose National Examination to be implemented as the absolute determiner

for the students to graduate since the school should be the one which knows their students' ability better. As stated in Sukayadi and Mardiani (2011), the national examination becomes nightmare, which causes injustice and anxiety because of the pressure that students feel, as they have to pass the test. Moreover, the national examination tends to hinder the development of the students' national intelligence (Sulistyo, 2009). Then, some parties agree that if the national examination is implemented, it should not be the only determiner for the graduation. The national examination needs to be administrated since it can motivate the students to study seriously (Sutari, 2017).

In response to opposition from concerned parties relative to the national examination policy and implementation, the Ministry of Education and Culture in Indonesia reformed the policy. The new policy changed the national examination's status from being high-stakes test to low-stake test, meaning that students' graduation is determined by the authority of schools based on students' academic achievement at school (Saukah & Cahyono as cited in Suatri, 2017). To date, the national examination is implemented as a basis of mapping the quality of education in Indonesia. It is considered for the selection of the next level of education and for some corrective action and funding schemes to support the improvement of the quality of education at schools and district level (Saukah & Cahyono, 2015).

As mentioned in the *Standar Kompetensi Kelulusan* (standards of graduates' competencies), national examination is held to measure the achievement of competencies on the level of elementary and secondary education because of the learning process. One of the roles of the National Examination is to perform the mapping of achievement level of the learning results of students in each level. In addition, the grade of the national examination is used as admission factor for higher education institution. To continue to higher education, students need to consider their career path or career choice which will be their focus. This study focused on students' career choice when they entered the University. Career choice is a complex decision for undergraduate students since it determines the kind of profession that a student intends to pursue in life (Koech, Bitok, Rutto, Koech, Okoth, Korir, & Ngala, 2016). Thus, as a response to the new policy of the national examination and its relation to student's career choice, this study aimed to determine relationship of students' performance in the national examination to their career choice. Specifically, this study also aimed to explore the connectivity of low or high performing students to certain career choice; Realistic & Investigative, Artistic, Social, Enterprising, Conventional. Moreover, the other variables (sex, age, favorite subjects, Grade Point Average, course enrolled, number of siblings, parents' educational attainment, parents' occupation) on the students' career choice was also considered.

Methodology

To address students' career choice, this study was anchored on the Holland's (1997) RIASEC theory. It stands for Realistic, Investigative, Artistic, Social, Enterprising, and Conventional. Holland's (1997) theory of vocational interest has become a reference to understand vocational interest, choice, and satisfaction of individual. It is one of the most popular career theories. Holland offers one of the most popular theories of vocational choice, which has been used to classify people according to their vocational interest and six corresponding work environments (Gitonga, Orodho, Kigen, & Wangeri, 2013). Based on the RIASEC Theory (Holland, 1997), this study formulated a conceptual framework anchored on the ideas and the theory. Students' performance in the four components of the national examination

such as language component, numeric component, science component, and natural component can generate knowledge that can be interrupted as basis for choosing specific career track or choice. Moreover, the Indonesian career choice that covers applied science and non-applied science courses offered substantial data that were transformed into empirical evidences that determined the relationship of high and low performing students in the national examination to certain career path.

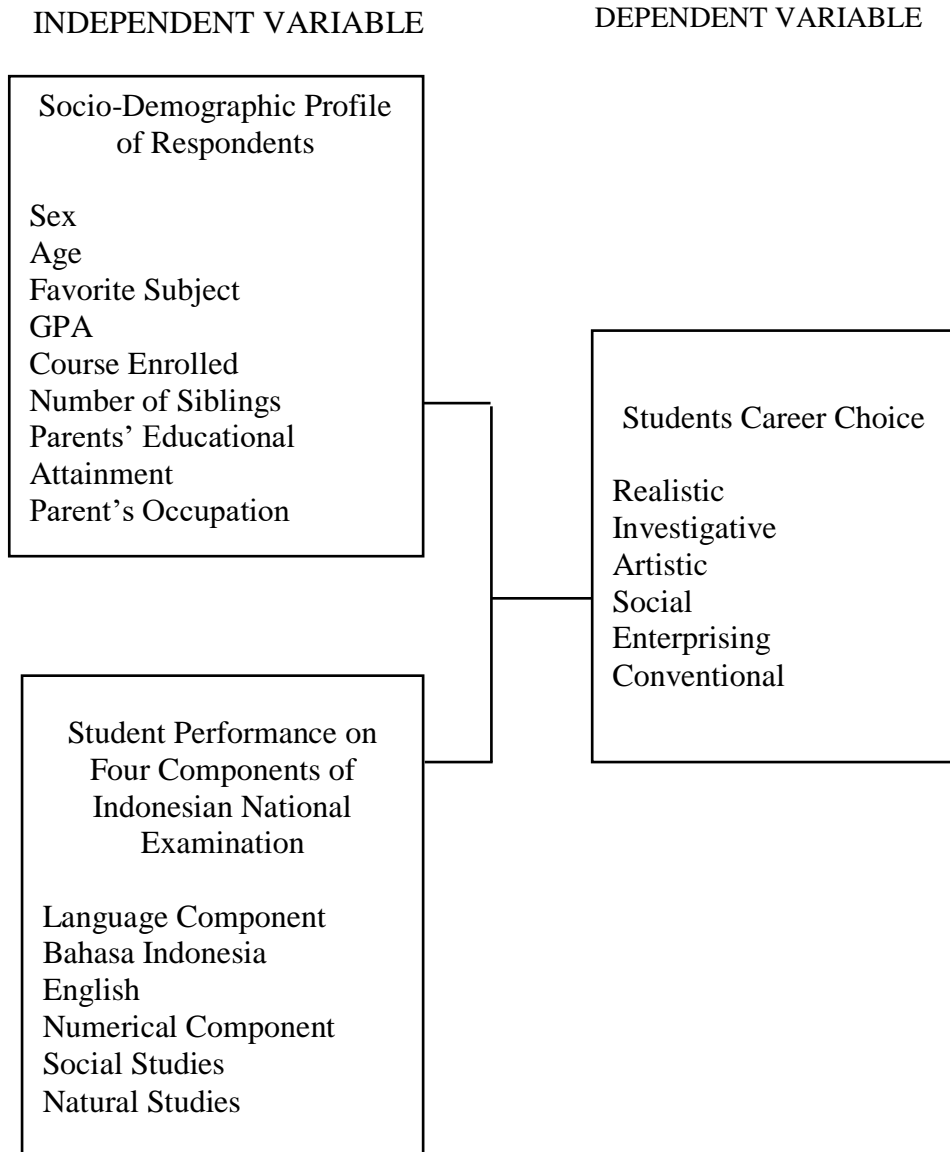


Figure 1: The Conceptual Framework of the Relationship between Independent and Dependent Variables

Result and Discussion

Respondents' Socio-demographic Characteristics

Table 1 presents the socio-demographic characteristics of the respondents which include sex, age, favorite subject, GPA, course enrolled, number of siblings, parents' educational attainment, and parents' occupation. **Sex.** The majority of the respondents in this study were female which consisted of 231 respondents which comprised 74.8% while male respondents were only 78 respondents which accounted for 25.2 percent. Findings of the study showed similar result with the study conducted by Swanepoel and Linde (2009) where majority of the first year undergraduate students were female.

Age. The majority of the respondents were 18 years old which comprised 53.7 percent (165), followed by 37.8 percent (116) of respondents who were 19 years old. Meanwhile, respondents with age of 19 composed only 2.9 percent (9) whereas respondents with age of 16 composed 0.6 percent (2). The respondents who were 21 years old had the least number of 0.3 percent. Respondents had a mean age of 18.44. Based on their mean age, all the respondents were considered young since they all belonged to first year students in the university. These findings showed similar result with the study conducted by Nyamwange (2016) where majority of the first year undergraduate students were between 19 and 25 year old.

Favorite Subject. Respondents posited that their most favorite subject in Senior High School was Natural Science Subject which comprised 46.5% followed by Mathematics (18.7%), English (18.4%) and Social science (9.7%) respectively. Indonesian Language got the least favorite subjects with 6.8 percent degree of most preferred courses. This result could be attributed to the low Indonesian literacy in accordance with the study "Most littered Nation in the World" done by Connecticut State University in 2016. Indonesia was ranked in 60th out of 61 countries.

Table 1. Overall Outline Of Socio Demography Profile of the Respondents

Profile		Frequency N=310	Percentage
Sex	Male	78	25.2%
	Female	232	74.8%
Age	16	2	0.6%
	17	9	2.9%
	18	165	53.7%
	19	116	37.8%
	20	14	4.6%
	21	1	0.3%
	Mean Age	18.44	
SD	0.637		
Favorite Subject	Indonesian Language	21	6.8%
	Mathematics	58	18.7%
	Natural Science	144	46.5%

	English	57	18.4%
	Social Science	30	9.7%
GPA	Excellent	99	31.9%
	Very Satisfactory	202	65.2%
	Fair	9	2.9%
	Unsatisfactory	-	-
	Mean	3.27	
	SD	0.364	
Course Enrolled	Chemistry	74	23.9%
	Pharmacy	40	12.9%
	Biology	27	8.7%
	English	60	19.4%
	Geophysics	32	10.3%
	Physic	33	10.6%
	Law	15	4.8%
	Economy	29	9.4%
Number of Siblings	None	51	16.9%
	1 siblings	69	22.9%
	2.siblings	126	41.9%
	3 siblings	39	13.0%
	4 siblings	8	2.7%
	5 siblings	4	1.3%
	6 siblings	1	0.3%
	7 siblings	3	1.0%
Father's Educational Attainment	Not attend School	1	0.3%
	Elementary	36	11.8%
	Junior High School	31	10.2%
	Senior High School	158	51.8%
	Undergraduate	67	22.0%
	Graduate	10	3.3%
	Post Graduate	2	0.7%
Father' Occupation	Employed	277	89.4%
	Unemployed	28	9.0%
Mother's Educational Attainment	Not attend School	2	0.7%
	Elementary	49	16.1%
	Junior High School	35	11.5%
	Senior High School	149	48.9%
	Undergraduate	65	21.3%
	Graduate	4	1.3%

	Post Graduate	1	0.3%
Mother's Occupation	Employed	141	45.5%
	Unemployed	164	52.9%

GPA. The data showed the students' Grade in the first semester in the University. The GPA per respondent was classified according to the following: excellent (3.26 - 4.00), Very Satisfactory (2.51 – 3.25), Fair (1.76 - 2.50) and Unsatisfactory (1.00 – 1.75). Majority of the respondents got a good grade (very satisfactory) which comprised 65.2% and 31.9% of the respondents got Excellent Grade, while the rest 2.9% got fair grade.

Course Enrolled. The respondents came from various courses. Around 23.9% of respondents were chemistry students, 19.4% of respondents were English students, Pharmacy students comprised 12.9 percent, Physics students were 10.6 percent, Geophysics accounted for 10.3 percent, Economics comprised 9.4 percent, and Biology for 8.7 percent. The least percentage was 4.8 percent for law students. This result was due to the random selection of the respondents who were voluntary included in this study.

Number of Siblings. The number of siblings revealed that the predominating number of sibling among the respondents was two siblings which comprised the biggest percentage among all (41,9%) which was described as a small family. This was followed by 22.9 percent of the respondents who had one sibling, 16.9 percent with no sibling and 13.0% with three siblings. Meanwhile, the rest had four siblings (2.7%), 5 siblings (1.3%), 6 siblings (0.3%) and 7 siblings comprised 1.0 percent.

Parents' Highest Educational Attainment. Majority of their fathers (51.8%) finished Senior High School. Fathers with undergraduate degree comprised 22 percent from the total population, followed by graduate degree (3.3%) and post graduate degree (0.7%). Fathers who finished Junior High School accounted for 10.2 percent and Elementary School accounted for 11.8 percent while only 0.3 percent did not attend school. More so, 48.9 percent of their mothers finished Senior High School representing the most dominant educational characteristic of respondents' mothers. Mothers with undergraduate degree comprised 21.3 percent while graduate degree accounted for 1.3% and post graduate degree accounted for 0.3%. Mothers who finished Junior High School comprised 11.5% while those who finished Elementary School comprised 16.1%. Moreover, only 0.7 percent mother did not attend school.

Parents' Occupation. Based on the data, the majority of fathers were employed which accounted for 89.4% while the rest (9%) were not working. On the opposite, majority of mother are unemployed (52.9%) while the rest were working (45.5%).

In sum, majority of the respondents (310) were females (74.8%). They had mean age of 18,45. Most of the respondents were enrolled in chemistry (23.9%) and English (19.4%) study programs. The majority of the respondents got a good grade (very satisfactory) which comprised 65.2% and 31.9% of the respondents got Excellent Grade. The number of siblings revealed that the predominating number of sibling among the respondents was having 2 siblings which comprised the biggest percentages among all (41.9%). Majority of their fathers (51.8%) finished Senior High School and father who were employed accounted for 89.4 percent. Some 48.9 percent of their mothers finished Senior High School representing the most dominant educational characteristic of respondents' mothers and majority of mother were unemployed (52.9%).

Students' performance In the four component of The National Examination in terms of language component (Bahasa Indonesia & English), numerical component, social sciences, and natural sciences component

Table 2 shows students' overall score in the National Examination. The data showed that students had very satisfactory score in the National Examination with the mean of $\bar{x}=2.67$, $SD=.540$. Respondents posted the highest scores in Bahasa Indonesia which comprised mean at the level of $\bar{x}=3.07$, $SD=.662$ which can be described as Very Satisfactory. It was followed by Social Science which comprised the total mean of $\bar{x}=2.76$, $SD=.675$ which can be described as very satisfactory. More so, students got the very satisfactory in English subject with the mean $\bar{x}=2.57$, $SD=.784$. However, respondents got fair grades in Mathematics and Natural Science subjects with the mean $\bar{x}=2.18$, $SD=.184$ and $\bar{x}=2.40$, $SD=.780$.

Table 2. Respondents' Summary of Scores in the National Examination

Subjects	Pooled Mean	Std. Deviation	Verbal Interpretation
Bahasa Indonesia	3.07	.662	Very Satisfactory
English	2.57	.784	Very Satisfactory
Mathematics	2.18	.814	Fair
Social Science	2.76	.675	Very Satisfactory
Natural Science	2.40	.780	Fair
Overall Mean	2.57	.540	Very Satisfactory

Legend:

- 3.26 - 4.00 = Excellent
- 2.51 - 3.25 = Very Satisfactory
- 1.76 - 2.50 = Fair
- 1.00 - 1.75 = Unsatisfactory

This finding coincided with the findings of Abdullah (2017) that students posted the highest scores in Bahasa Indonesia subject and followed by English Subject. However, students posted the lowest scores in Natural Science and Mathematics subject.

Table 3 shows the students' performance in the national examination in terms of Language component, numerical component, social science component, and natural science component. From the result it was clear that the National Examination component was understood by the students with the overall mean at the level $\bar{x}=3.04$, $SD=0.38$. Moreover, Natural science component had the highest mean among four components ($\bar{x}=3.04$, $SD=0.38$) which can be described as understood. The highest mean was seen in item number 1 which stated that the natural science component of the test was understood by the students. The lowest mean was in item number three with mean $\bar{x}=2.94$, $SD=0.53$ which asserted that the symbols/graphics used in the test were understood. The findings negated the results of the study of Rukmini and Jumaroh (2015) where they found out that National Examination did not have content-evidence of validity since the test-items did not cover all sections required by the curriculum which the students needed which resulted in students' confusion in answering the question in the National examination, especially in the English subject.

Table 3. Student Performance on the Four Components of the National Examination

PARAMETERS	Mean	SD	Verbal Interpretation
A. LANGUAGE COMPONENTS			
1. The concepts of Bahasa Indonesia in the test.	3.23	0.49	Understood
2. The concepts of Bahasa English in the test.	2.91	0.57	Understood
3 The structure of questions in language test.	3.06	0.50	Understood
4. The vocabulary used in Bahasa Indonesia and English.	2.94	0.54	Understood
5. The reading articles used in the test.	2.98	0.47	Understood
Pooled Mean	3.02	0.35	Understood
B. NUMERICAL COMPONENTS			
1. The mathematical concepts in the test.	2.75	0.61	Understood
2. The structure of questions in mathematical test.	2.74	0.58	Understood
3. The numerical symbols used in the test.	2.83	0.55	Understood
4. The choices in each question in the test.	2.86	0.57	Understood
5. The problem solving question in the test.	2.62	0.60	Understood
Pooled Mean	2.76	0.42	Understood
C. SOCIAL COMPONENTS			
1 The concepts of social studies in the test.	3.08	0.59	Understood
2. The structure of questions in social studies test.	3.07	0.58	Understood
3. The choices in the each question in social studies.	3.07	0.68	Understood
4. The topics included in social studies test.	2.85	0.71	Understood
5. The proper wordings used in each question in the test.	2.95	0.57	Understood
Pooled Mean	3.00	0.60	Understood
D. NATURAL SCIENCE COMPONENTS			
1. The natural science components of the test.	3.15	0.43	Understood
2. The structure of questions in natural science test.	3.07	0.46	Understood
3 The symbols/graphics used in the test.	2.94	0.53	Understood
4 The choices used in each question in the test.	3.03	0.51	Understood
5 The proper wordings used in each question in the test.	3.00	0.48	Understood
Pooled Mean	3.04	0.38	Understood
Overall Mean	2.96	0.44	Understood

Legend:

3.26 - 4.00 = Highly Understood

2.51 – 3.25 = Understood

1.76 – 2.50 = Not Understood

1.00 – 1.75 = Highly Not Understood

Career choice of students in terms of realistic, investigative, artistic, social, enterprising, and conventional

Table 4 depicts the summary of students' career choice. The higher mean was obtained in social career choice with mean of $\bar{x}=3.20$ ($SD=.418$). It was followed by enterprising career choice with an overall mean of $\bar{x}=3.07$ ($SD=.566$) and conventional with an overall mean of $\bar{x}=2.95$ ($SD=.522$). Investigative was the fourth preferred career choice with mean of $\bar{x}=2.89$

(SD=.418). Second last preferred career choice among the respondents was artistic career choice with the overall mean at the level $\bar{x}=2.82$ (SD=.539). Last, realistic career choice became the last preferred career choice among the respondents. It had overall mean of $\bar{x}=2.77$ (SD=.437)

Table 4. Summary of Students' Career Choice

Students' Career Choice	Pooled Mean	SD	Verbal Description
Realistic	2.77	.437	Like
Investigative	2.89	.418	Like
Artistic	2.82	.539	Like
Social	3.22	.437	Like
Enterprising	3.07	.566	Like
Conventional	2.95	.522	Like
Overall Mean	2.83	.260	Like

To summarize, among 310 respondents in this study, social career choice was their most preferred career choice from the six types of career choices and realistic career choice was the last preferred career choice. Social career choice comprised overall mean of $\bar{x}=3.20$ (SD=.418). These findings established confirmation of previous studies on career choice by Gashi and Berxulli (2017) that the majority of the respondents reported to have social personality type to choose social career choice. However, the finding about the last preferred career choice negated the study where the last preferred career choice was enterprising career choice. More so, finding of this study also coincided with the finding of Dughi and Patcas (n.d.) that the majority of the respondents chose to pursue a career of a social type (32%) followed by realistic type (25%) and the last preferred career choice was conventional.

Comparison between high performing students and low performing students on their scores in the national examination

To address the fourth objective, the comparison between high and low performing students' performance on their scores in the National Examination is presented in table 6. To be able to classify particular respondents whether he/she belongs to high or low performing students, the researcher provided categorical groupings on their actual scores in the national examination. In reference to the standard category of students' performance, respondents who revealed their numerical scores between 81-100 with verbal description of Excellent and 71-80 with verbal description of Very Satisfactory had been classified by the researcher as high performing students.

On the other hand, respondents who revealed their numerical scores between 51-70 with verbal description of Fair and 0-50 with verbal description of Unsatisfactory had been classified by the researcher as low performing students. It was interesting to know that the use of high and low categories did not generalize the status of the students' performance in the National Examination. Thus, this category of high and low were only used purposively for this particular comparative analysis.

Table 5. Comparison of the High and Low Performing Students and Low Performing Students on their Scores in the National Examination

Scores National Examination	in Mean of the Respondent		t- value	Sig. (2-tailed)
	High Performing Students	Low Performing Students		
Bahasa Indonesia	3.39	2.80	8.73	.000**
English	3.10	2.11	14.29	.000**
Mathematics	2.66	1.77	11.53	.000**
Social Science	2.84	2.69	3.20	.002**
Natural Science	3.01	3.04	-.92	.356

Legend: *significant at $p < 0.05$

**highly significant at $p < 0.01$

A significant difference was noted in national examination scores of the two groups of respondents in Bahasa Indonesian subject ($r=.000$, $p < 0.01$), ($t=8.73$), English ($r=.000$, $p < 0.01$), ($t=14.29$), Mathematics ($r=.000$, $p < 0.01$), ($t=11.53$) and Social Science ($r=.002$, $p < 0.01$), ($t=3.20$). A higher mean score was obtained by high performing students ($x=3.39$) compared with low performing students ($x=2.80$) in Bahasa Indonesia subject. More so, high performing students had higher mean ($x=3.39$) compared to low performing students ($x=2.11$) in English examination.

Moreover, a higher mean was observed by the high performing students ($x=2.66$) against the mean score by low performing students ($x=1.77$) in Mathematics subject. Last, a higher mean score was obtained by high performing students (2.84) compared to low performing students (2.69) in Social Science subject. Conversely, there was no recorded significance difference between high and low performing students with their scores in Natural Science subjects. This finding coincided with the findings of Abdullah (2017) that students posted the highest scores in Bahasa Indonesia subject and followed by English Subject. However, students posted the lowest scores in Natural Science and Mathematics subjects.

Table 6 shows the result of the comparison of high and low performing students and their career choice. The findings revealed high significant difference in Realistic ($r=.031$, $p < 0.01$), ($t=.887$), Investigative ($r=.022$, $p < 0.01$), ($t=.2.29$), Enterprising ($r=0.42$, $p < 0.01$), ($t=-2.04$) and Conventional ($r=0.41$, $p < 0.01$) ($t=.1.77$). Between two groups of respondent, higher mean was obtained by high performing students (2.79) compared to the mean score by low performing students ($x=2.15$) in term of realistic career choice. Furthermore, a higher mean was seen by high performing students ($x=2.95$) compared low performing students ($x=2.04$) in investigative career choice.

Table 6. Comparison between High and Low Performing Students and their Career Choice

Respondents' Career Choice	Mean of the respondents		<i>t-value</i>	Sig. (2-tailed)
	High Performing Students	Low Performing Students		
Realistic	2.79	2.15	.887	.031*
Investigative	2.95	2.04	2.29	.022**
Artistic	2.84	2.79	.894	.372
Social	3.20	3.24	.891	.373
Enterprising	3.01	3.14	-2.04	.042*
Conventional	2.99	2.92	1.77	.041*

Legend: *significant at $p < 0.05$

More so, a higher mean was obtained by low performing students ($\bar{x}=3.01$) compared to high performing students ($\bar{x}=3.14$) in enterprising career choice. Last, a higher mean score was observed from high performing students ($\bar{x}=2.99$) compared to low performing students ($\bar{x}=.041$) in terms of conventional career choice. Considering the statistical significant differences in the various components of career choices, the hypothesis of this study which stated that there is no significant difference between high performing students and low performing students in their career choice is hereby rejected.

Relationship between socio-demographic profile of high and low performing students in the national examination and their career choice

As shown in table 7, there were significant relationship between sex and social career ($r=.148$, $p < 0.05$), favorite subject and conventional career choice ($r=1.55$, $p < 0.05$), GPA and investigative career choice ($r=-.153$, $p < 0.01$), and course enrolled and social career choice ($r=.174$, $p < 0.05$). In sex and social career choice variable, the result revealed that sex had a moderate negative correlation with social career choice ($r= -.148$, $p < .05$). This finding most likely showed that female respondent had the tendency to choose social path as career choice.

In favorite subject and conventional career choice variable, a moderate positive correlation between respondents' favorite subject and conventional career choice ($r=1.55$, $p < 0.05$) was found. Based on the result on this study, the top three favorite subjects of the high-performing students included Natural Science, English and Math. Based on the data, this significant relationship may imply that most high-performing students chose career tracks that were in connection with conventional career choice. In GPA and investigative career choice variable, a moderate negative correlation between respondents' GPA and Investigative career choice ($r=-.153$, $p < 0.05$) was revealed. Based on the result on this study, students who had low scores mostly chose investigative career choice than other career choices. In course enrolled and social career choice variable, the result revealed that respondents' course enrolled in the university had moderate positive correlation ($r=.174$, $p < 0.05$) with social career choice. It means that students enrolled in Chemistry, English, and Pharmacy courses tend to choose social career as their preferred career choice.

Table 7. Relationship of Socio-Demographic Profile and Career Choice of High Performing Students

Socio-Demographic Profile	Realistic	Investigative	Artistic	Social	Enterprising	Conventional
Sex	-.069	-.117	.057	-.148*	-.070	.008
Age	-.098	.031	-.010	-.006	.033	.113
Favorite Subject	.078	.025	.034	-.034	.025	.155*
GPA	-.065	-.153*	.030	.033	-.043	-.032
Course Enrolled	.092	.113	.050	.174*	.042	.052
Number of Siblings	.061	.074	.087	.107	.089	.048
Fathers' Educational Attainment	-.013	-.099	.009	.055	.061	.079
Fathers' Occupation	-.077	.072	-.004	-.004	-.077	.003
Mothers' Educational Attainment	.265	.117	.062	.401	.209	.326
Mothers' Occupation	-.045	-.063	-.099	.001	.055	.026

*. Correlation is significant at the 0.05 level (1-tailed).

**. Correlation is significant at the 0.01 level (1-tailed).

By looking at the relationship of socio-demographic profile of high performing students and their career choice, table 7 shows the relationship between sex and investigative career choice ($r = -.131$, $p < 0.05$), GPA and investigative career choice ($r = -.140$, $p < 0.05$), GPA and conventional career choice ($r = .146$, $p < 0.05$), fathers occupation and realistic career choice ($r = -.146$, $p < 0.05$), investigative career choice ($r = -.137$, $p < 0.05$), and conventional career choice ($r = -.139$, $p < 0.05$). More so, the relationship also existed between mothers' occupation and realistic career choice ($r = .167$, $p < 0.05$), social career choice ($r = .152$, $p < 0.05$), and enterprising career choice ($r = .147$, $p < 0.05$).

In sex and investigative career choice variable, it was revealed that sex had moderate negative correlation with investigative career choice ($r = -.131$, $p < 0.05$). The finding showed that most female was likely to choose investigative career choice. However, the findings negated the result of the study of Su (2009) which was cited by Callahan (2015) that there were significant differences between women and men in their career choice. Women were found significantly more interested than men in Artistic, Social and Conventional areas and activities.

In GPA and investigative career choice variable, a moderate negative correlation between respondents' GPA and Investigative career choice ($r = -.140$, $p < 0.05$) existed. Based on the result on this study, students who had lower scores in their first semester mostly chose investigative career choice.

In GPA and conventional career choice variable, a moderate positive correlation was established between respondents' GPA and Investigative career choice ($r=.146$, $p<0.05$). The finding showed that students who had high GPA tend to choose conventional career choice. In fathers' occupation and career choice variable, father's occupation had moderate negative correlation with investigative career choice ($r=-.146$, $p<0.05$), social career choice ($r=-.137$, $p<0.05$) and conventional career choice ($r=-.139$, $p<0.05$). It implies that students whose fathers had no job tend to choose investigative, social, and conventional career choices.

Table 8. Relationship of Socio-Demographic Profile and Career Choice of Low Performing Students

Socio-Demographic Profile	Realistic	Investigative	Artistic	Social	Enterprising	Conventional
Sex	-.045	-.131*	.022	.051	-.020	.010
Age	.022	.119	-.017	.077	.128	.020
Favorite Subject	-.077	-.111	.091	.037	.083	.081
GPA	.005	-.140*	.105	.077	.033	.146*
Course Enrolled	-.076	-.007	-.020	-.025	.057	.057
Number of Siblings	-.076	-.007	-.020	-.025	.057	.057
Fathers' Educational Attainment	.078	-.032	.023	-.072	.008	-.027
Fathers' Occupation	-.146*	-.137*	.085	-.018	-.017	-.139*
Mothers' Educational Attainment	.002	-.019	.108	-.045	-.043	-.020
Mothers' Occupation	.167*	.084	-.021	.152*	.147*	.122

*. Correlation is significant at the 0.05 level (1-tailed).

**. Correlation is significant at the 0.01 level (1-tailed).

In mothers' occupation and social career choice, moderate positive correlation existed between mothers' occupation and Realistic ($r=.167$, $p<0.05$), Social ($r=.152$, $p<0.05$), and Enterprising ($r=.147$, $p<0.05$). Those results revealed that students whose mother had job or occupation most likely chose realistic, social and enterprising career path as their career choice. In sum, there was a correlation between high and low performing students socio demographic profiles. The hypothesis of this study which stated that there is no statistically significant correlation between socio-demographic profile and Indonesian students' career choice is hereby rejected. These findings have established confirmation of previous studies on career choice or career track (Javier, 2017; Nyamwange, 2016). The studies chronicled factors associated in choosing career choice or career track. Javier (2017) found out that there were significant relationships between socio-demographic profiles and choice of career track; environment and

career track and personality and career track. In the study of Callahan (2015), gender influenced the respondents' career choice.

Relationship between high and low performing students' performance in the national examination and their career choice

Table 9 shows correlation between high performing students' performance and students' career choice. Based on the data, there was strong positive correlation between language components and realistic, investigative, and artistic career choices. More so, a strong positive correlation between students' performance in natural science component and realistic, investigative and enterprising career choice was found. In numerical component and career choice, a strong positive correlation had occurred between students' performance in the National Examination and realistic, investigative, social, and conventional career choices. In language component and career choice, a strong positive correlation had occurred between students' performance in language component and realistic career choice ($r=.235$, $p<0.05$), Investigative career choice ($r=.248$, $p<0.05$) and Artistic career choice ($r=.239$, $p<0.05$). It implies that students who understood well in the examination tend to choose realistic, investigative, and artistic career choice. More so, Language Component also had moderate positive correlation to conventional career choice ($r=.169$ $p<0.05$). The finding showed implies that students who performed well in national examination tend to choose conventional career choice.

In numerical component and career choice, a strong positive correlation had occurred between students' performance in the National Examination and realistic ($r=.301$, $p<0.05$), Investigative ($r=.412$, $p<0.05$), Social ($r=.253$, $p<0.05$) and Conventional ($r=.344$, $p<0.05$). It revealed that high-performing students who understood the numerical components in the national examination mostly chose realistic, investigative, social and conventional career choices. Moreover, a moderate positive correlation existed between numerical component and enterprising career choice ($r=.165$, $p<0.05$). It implies that students who understood numerical components in the national examination chose enterprising career choice.

In natural science component and career choice, the result revealed a strong positive correlation between students' performance in natural science component and Realistic career choice ($r=.297$, $p<0.05$), Investigative ($r=.306$, $p<0.05$) and Enterprising career choice ($r=.295$, $p<0.05$). It implies that students who strongly understood the natural science component in the national examination mostly chose realistic, investigative and enterprising career choice. More so, there were moderate positive correlations between natural science component to artistic ($r=.191$, $p<0.05$), social ($r=.205$, $p<0.05$) and conventional career choice ($r=.208$, $p<0.05$). However, there was no correlation between social science component and career choice.

Table 9. Relationship between High Performing Students' Performance and Students' Career Choice

Students Performance	Realistic	Investigative	Artistic	Social	Enterprising	Conventional
Language Component	.235**	.248**	.239**	.077	.153	.169*
Numerical Component	.301**	.412**	.111	.253**	.165*	.344**
Social

Science Component Natural Science Component	.297**	.306**	.191*	.205*	.295**	.208*
---	---------------	---------------	--------------	--------------	---------------	--------------

*. Correlation is significant at the 0.05 level (1-tailed).

** . Correlation is significant at the 0.01 level (1-tailed).

Table 10 shows the relationship between low performing students' performance and students' career choice. Based on the data, strong positive correlation had occurred between students' performance in language component and realistic, investigative, artistic, social and conventional career choice. More so, numerical component had correlation to all types of career choice as well as language component. Data showed strong positive correlation between natural science component and realistic, investigative, artistic, social, and enterprising career choices.

In language component and career choice, strong positive correlation had occurred between students' performance in language component and realistic career choice ($r=.204$, $p<0.05$), Investigative career choice ($r=.208$, $p<0.05$), Artistic career choice ($r=.445$, $p<0.05$), Social career choice ($r=.243$, $p<0.05$) and Conventional career choice ($r=.243$, $p<0.05$). It implies that students who understood well the examination tend to choose realistic, investigative, artistic, social, and conventional career choice. More so, Language Component also had moderate positive correlation to enterprising career choice ($r=.187$, $p<0.05$). The finding implied that students who performed well in national examination tend to choose conventional career choice.

In numerical component and career choice, numerical component had correlation to all types of career choice as well as language component. The data showed strong positive correlation between numerical component and realistic ($r=.301$, $p<0.05$), investigative ($r=.412$, $p<0.05$), social ($r=.253$, $p<0.05$) and conventional ($r=.344$, $p<0.05$). The data appeared to suggest that students who understood well the numerical component mostly choose realistic, investigative, social, and conventional career choice. More so, a moderate positive correlation had occurred between numerical component and Enterprising career choice ($r=.165$, $p<0.05$), it implies that students who performed well in Numerical component tend to choose enterprising career choice.

In natural science component and career choice, the data showed strong positive correlation between natural science component and career choice at the lever $r=.271$, $p<0.05$ for realistic career choice, $r=.356$ for investigative career choice, $r=.298$ for artistic career choice, $r=.465$ for social career choice, $r=.291$ for enterprising career choice and $r=.378$ for conventional career choice. A closer look at the data indicated that students who performed well in national examination on natural science component chose realistic, investigative, artistic, social, enterprising, and conventional career choices.

Table 10. Relationship between Low-Performing Students' Performance and Students' Career Choice

Students Performance	Realistic	Investigative	Artistic	Social	Enterprising	Conventional
Language Component	.204**	.208**	.445**	.243**	.187*	.243**
Numerical	.301**	.412**	.111	.253**	.165*	.344**

Component Social Sciences	.185	.225	.203	.002	.119	.185
Component Natural Science	.271**	.356**	.298**	.465**	.291**	.378**

*. Correlation is significant at the 0.05 level (1-tailed).

** . Correlation is significant at the 0.01 level (1-tailed).

In sum, there was correlation between high and low performing students' performance in the national examination and their career choice. The hypothesis of this study which stated that there was no statistical significant correlation between high and low performing students' performance in the National Examination and their career choice was rejected. These findings established confirmation of previous studies about the impact of academic skills which was assessed through national examination scores of secondary school on the success of further studies by Parri and Aas (2006) that the school which students enter on the basis of their national examination scores had significant impact on their study performance which end up in their preferred course enrolled and also related to their preferred career track.

Conclusion and Recommendations

Based on the result of the study, the following conclusions are drawn; 1) Majority of the respondents were female with mean age of 18.44. Their favorite subject was natural Science with 46.5%. Some 65.2% of the respondents had very satisfactory GPA in the first semester. Majority of the respondents were enrolled in Chemistry and English study program. The dominating number of siblings among the respondents was two siblings (41.9%). Majority of their fathers (51.8%) and 48.9 percent of their mothers finished Senior High School. Most of their fathers were employed which accounted for 89.4%. On the opposite, majority of the mothers were unemployed (52.9%) while the rest were working (45.5%). 2) Students had the highest scores in Bahasa Indonesia national examination, followed by Social Science and English which can be described as Very Satisfactory. However, they got fair scores in Mathematics and Natural Science examination. 3) Majority of the respondents tend to choose social career choice as their preferred career choice from the six types of career choice while realistic career choice became the last preferred career choice. 4) High and low performing students had significant difference mean scores in term of their national examination scores and their career choice in realistic, investigative, enterprising and conventional career choice. 5) There was a significant relationship between high and low performing students' socio demographic profile and their career choice in terms of sex, respondents' favorite subject, GPA, course enrolled, fathers' highest attainment education and mothers' occupation. The result most likely suggested that students having parents graduated from College or having professional parents influenced them to follow their parents' footsteps, aspire for similar career like that of their parents, and most likely achieve equal level with their parents' achievement. 6) There was a significant relationship between high and low performing students' performance in the national examination and their career choice. The result most likely implied that if students clearly understood the language components, they tend to choose Realistic, Investigative, Artistic, and Conventional and if they understood the numerical

component they tend to choose any of the career path except artistic since this track mostly included both students' characteristics in the national examination.

In the light of the result and conclusions of this study, the following measures are strongly recommended: 1) There should be more attention from the government, teacher, parents, and students to national examination implementation for Senior High School. Students may improve the score of their students in the National Examination since almost half of the respondents got lower score in the previous National Examination in 2017. The Indonesian government needs to improve the educational policy related to the National Examination. 2) The government needs to focus on the increment of jobs related to social career such as teaching, nursing, counselling. Government also needs to increase salary to promote quality life. 3) Students should be provided with effective orientation which could give the students insight about their career choice to promote better understanding of their career choice when entering university. This could be done by school's guidance counselor along with the guidance from teachers and parents. 4) Further study should be conducted related to the national examination implementation and career choice. 5) Since majority of the respondents preferred to follow their parents' footsteps in terms of achievement, the schools should organize some sort of orientations for students with parents who have lesser achievements, this would give them the opportunity to strive higher. 6) Further investigation could also be done among students who choose artistic career which is a combination of students with extreme achievements.

References

- Ahmed, K. A., Sharif, N., & Ahmad, N. (2017). Factors influencing students' career choices: Empirical evidence from business students. *Journal of Southeast Asian Research*. DOI: 10.5171/2017.718849.
- Alhadza, A., & M, Z. (2017). National examination and the quality of education in Indonesia. *advances in social sciences. Research Journal*, 21(4). DoI:10.14738/assrj.421.3613.
- Armstrong, P. I., Day, S. X., McVay, J. P., & Rounds, J. (2008). Holland's RIASEC Model as an integrative framework for individual differences. *Journal of Counseling Psychology*, 1(55). 1-18.
- Bernard, R. H. (2006). *Research method in anthropology*. New York, NY: Altamira Press.
- Calderon, J. F. & Gonzales, E. C. (1993). *Methods of research and thesis writing*. MG Reprographics Supply & Service Inc. (Reprinted by National Book Store on 2016).
- Callahan, M. N (2015). The right attitude: gender, conservatism, and career choice (Unpublished Graduate Thesis and Dissertations). Retrieved from <http://lib.dr.iastate.edu/etd/14333>
- Cramer, J., Dilling A., Hockemeyer, B., & Nicholson, J. (2012). Birth order and impact on college major choice. *URJHS*, 10.
- Creswell, J. W. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches*. Thousand Oaks, CA: Sage.
- Dughi, T., & Patcas, M. R. (n.d.). The impact of the personality and social environment in adolescents career choice. *An Article*, 88-101.

- Edwards, K., & Quinter, M. (2011). Factors influencing students career choices among secondary school students in Kisumu Municipality, Kenya. *Journal of Emerging Trends in Educational Research and Policy Studies (JETERAPS)*, 2(2), 81-87.
- Farley, J. A. (2015). An examination of high-achieving college students: Career indecision and career thoughts (Unpublished Dissertations). University of Tennessee.
- Furaidah., Saukah, A., & Widiati, U. (2015). Washback of English national examination in Indonesian context. Retrieved from <http://dx.doi.org/10.15639/teflinjournal.v26i1/36-58>
- Gashi, L. J., & Berxulli, D. (2017). Personality types, career choice and career certainty among high school students. *International Journal of Teaching and Education*, 5(1). 25-35.
- Gitonga, C. M., Orodho, J. A., Kigen, W., & Wangeri, T. (2013). Gender differences in Holland. *International Journal of Education and Research*, 7 (7).
- Jamiludin., Darnawati., & Uke, W. A. S. (2017). Students' perception towards national examination 2017: Computer-based test or paper-based test. *Mediterranean Journal of Social Science*. 4(8), 139-144.
- Javier, L. G. (2017). Correlates of track choices of senior high school students of Zaragoza National High School, Nueva Ecjia (Unpublished Thesis).
- Kong, J., Xu, J. Y., & Zhang, Hao. (2016). Holland's SDS applied to Chinese college students: A revisit to cross-culture adaptation. *Journal of Educational Issues*, 2(1), 215-230.
- Muntholi'ah. (2013). Ujian nasional, dulu, kini dan yang akan datang: Tinjauan normatif. *Jurnal Pendidikan Islam*, 7(1), 161-180.
- Nauta, M. M. (2010). The development, evolution, and status of Holland's theory of vocational personalities : Reflections and future directions for counseling psychology. *Journal of Counseling Psychology*, 1(57), 11-22.
- Nyamwange, J. (2016). Influence of student's interest on career choice among first year university students in public and private universities in Kisii County, Kenya. *Journal of Education and Practice*, 4(7), 96-103.
- Parri, J., & Aas, K. (2006). National examination scores as predictors of university students' performance in Estonia. *TRAMES*, 3, 255-267.
- Proyer, R. T. (2006). The relationship between vocational interest and intelligence : Do findings generalize across different assessment methods?. *Psychology Science*, 4(48), 463-476.
- Rukmini, D., & Jumaroh. (2015). Does the national examination of English subject in indonesia test what should be tested?. *Jurnal Pengembangan Humaniora*, 3(15), 136-144.
- Saukah, A., & Cahyono, A. E. (2015). Ujian nasional di Indonesia dan implikasinya terhadap pembelajaran Bahasa Inggris. *Jurnal Penelitian dan Evaluasi Pendidikan*, 19 (2). 243-255.
- Smart, J. C., Feldman, K. A., & Ethington, C. A. (2006). *Holland's theory and patterns of college student success*. National Postsecondary Education Cooperative.
- Sukayadi, D., & Mardiani, R. (2011). *The washback effect of the English national examination on English teachers' classroom teaching and students' learning*, 13(1), 96-111.

- Sutari, V. R. (2017). National examination in Indonesia and its backwash effects : Teachers' perspectives. *Advances in Social Science, Education and Humanities Research (ASSEHR)*, 82, 331-333.
- Swinhoe, K. (2007). Factors affecting career choice among full-time students in a college of commerce. *The Vocational Aspect of Secondary and Further Education*, 19(43), 139-154.
- Zubaidi, N., & Novitasari, B. T. (2014). *Ideal vs practice of Indonesian senior high school national exam in English subject: Students' perception*. Retrieved from <http://www.researchgat.net/publication/263393377>.