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Students' anxiety in writing scientific work

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Abstract

Indonesia is the 4th the most populous country in the world after China, India and the United States. So that the State of Indonesia is included in one of the developing countries in the world. However, in scientific publications, Indonesia ranks 48th in the world. This encourages researchers' interest in assessing the psychological condition of Indonesian students in writing, because writing skills is not only cognitive but also emotional activities. The purpose of this study was to describe the anxiety conditions of Indonesian students in writing based on gender, ethnicity, province, department, university, and writing experience. This type of research is descriptive. The research sample is 1002 respondents consisting of eight ethnic groups in Indonesia. The data in this study are 5-point Likert scale politomy data collected using the writing apprehension scale. The instrument consisted of 26 statements of general anxiety about writing, teacher writing evaluations, peer writing evaluations, and professional evaluations (e.g., publishers and magazine editors) administered online. The research data were analyzed using the Rasch model using variable maps, and subtotal specifications. The findings show that there is no difference in anxiety of male and female students in writing, students who have never written will experience more writing anxiety than students who have written. Thus, students who have written but have not finished writing a paper will also experience writing anxiety.

Keywords: Anxiety, Writing, Student, Rasch Analysis.

Introduction

Along with the development of technology and media, the activity of writing scientific papers has also increased. The activity of writing scientific papers is growing rapidly in the world, ranging from the field of education to the field of science. Indonesia is one of the countries that make regulations regarding "Mandatory Scientific Publication" for S-1, S-2, and S-3, which is stated in the Director General of Higher-Education Letter No. 153/E/T/2012. The contents of the letter "S-1 students are required to produce papers published in scientific journals; S-2 students are required to produce national/international journals; Doctoral students are required to produce reputable international journals." Moving on from these regulations, students are required to make scientific works in order to complete their studies at universities. The regulation was made to catch up with Indonesia in terms of making scientific papers. Not only in Indonesia, scientific publications are very important in developing countries for the acquisition of academic degrees where the internationally recognized criteria are scientific publications (Zerem, 2013, 2014). In line with research (Archer, 2008) researching and publishing is an important part of being a member of the higher-education community. For this reason, writing is one of the skills that researchers and practitioners must possess in the field of learning (Jones, 2008). Successful academic writers are required to use high cognitive skills to put ideas into a neat grammatical structure based on high critical-thinking skills (Erkan & Saban, 2011). However, writing skills are not only cognitive but also emotional activities (Pajares & Valiante, 1997). Writing requires the direct involvement of students in expressing ideas clearly both cognitively and emotionally to meet the expectations of readers (Soleimani,

Hamasaid, & Saheb, 2020). However, there are several obstacles or problems that reduce students' motivation in writing or hinder the development of writing skills (Basturkmen & Lewis, 2002). One of the factors that hinder students' writing is writing anxiety.

Writing anxiety is a negative feeling experienced by writers when trying to generate ideas and words (Wynne, 2010). In a study, Hassan (2001) emphasized that when writing assignments were assessed by the teacher, students would do various ways to avoid writing because of the effect of writing fear. Daly & Miller (1975) stated that highly worried individuals lacked motivation to achieve their goals and are less willing to talk, highly concerned individuals avoid writing because they are afraid of being evaluated negatively, and even if they are obliged to write, they will experience deep anxiety. In addition, students who are very frightened in class usually fail to write because they do not attend class when writing is required (Daly & Miller, 1975). The results showed that students with high anxiety performed differently than students with low anxiety on standardized writing tests, and low anxiety significantly performed better on comprehensive tests of grammar and mechanics, as well as greater attention to writing skills (Daly, 1978). In a study, Genç & Yaylı (2019) presented a study of 257 Turkish participants who were proficient in English with the aim of finding the levels and sources of writing anxiety in a mixed methods study. The results showed that somatic anxiety was the most common type of anxiety among students learning English (Genç & Yaylı, 2019). Abdel Latif (2015) revealed that there are six sources behind students' understanding of writing English, namely the level of linguistic knowledge, perception of language competence, level of writing performance, perceived writing competence, learning practices, and fear of criticism. This encourages researchers' interest in assessing the psychological condition of Indonesian students in writing, because writing skills is not only cognitive but also emotional activities. This study aims to describe the condition of Indonesian students' anxiety in writing based on gender, ethnicity, province, department, university, and writing experience.

Method

Research Design

The method in this research is quantitative with descriptive research type. A research method that describes the characteristics of the population or phenomenon being studied, so that this research method focuses on answering the events or phenomena that occur.

Participants

The research sample is 1002 respondents consisting of eight ethnic groups in Indonesia. This research was conducted in Indonesia, which has been known as a country that has many islands spread over 34 provinces. The demographic description of the respondents can be seen in table 1.

Table 1. Demography of Research Respondents

Gender	Ethnic	Province	Major	University	Writing Experience
Male, n=214	Jawa (J), n = 296	Nanggroe Aceh Darussalam (A), n=11	Islamic Guidance and Counseling (A), n=511	UNINDRA (A), n=215	In process (S), n=124
Female, n=788	Sunda (S), n=148	Sumatera Utara (B), n=219	Guidance and Counseling (B), n=55	UHAMKA (B), n=567	Finish (P), n=167
	Melayu (U), n=120	Sumatera Barat (C), n=89	Islamic education (C), n=231	UINSU (C), n=14	Not completed (G), n=153
	Betawi (B), n=201	Sumatera Selatan (D), n=18	Technical Information (D), n=28	UNP (D), n=5	Never (T), n=558
	Minang (M), n=118	Riau (E), n=59	Madrasah Ibtidaiyah Teacher Education (E), n=13	UPGRIP (E), n=40	
	Batak (K), n=107	Jambi (F), n=24	Education technology (F), n=69	UIN IB Padang (F), n=8	
	Bugis (G), n=7	Bengkulu (G), n=9	Tarbiyah and teacher concentration history (G), n=9	UPI (G), n=37	

Gender	Ethnic	Province	Major	University	Writing Experience
	Banjar (R), n=5	Banten (H), n=18	Communication Da'wah (H), n=26	UNJA (H), n=11	
		DKI Jakarta (I), n=291	Economic Education (I), n=13	UNRI (I), n=51	
		Jawa Barat (J), n=242	Japanese Language Education (J), n=8	UIKA Bogor (J), n=12	
		Jawa Timur (K), n=8	Islamic Education Management (K), n=33	UIN SUSKA Riau (K), n=31	
		Jawa Tengah (L), n=11	Sports Education (L), n=6	UPI YPTK (L), n=11	
		NTT (M), n=3			

Procedure

The students were given a google form link to respond to a writing apprehension scale consisting of 26 statements of anxiety related to writing. each respondent can choose one of five alternative answers provided ranging from strongly disagree = 1 to strongly agree = 5.

Measuring

This study uses a writing apprehension scale that focuses on the individual's anxiety condition related to writing. This scale was adapted from (Daly & Miller, 1975) suggesting several categories, namely: anxiety about writing in general, teacher evaluation of writing, peer evaluation of writing, and professional evaluation (e.g., publishers and magazine editors). Furthermore, the instrument uses a 5-point Likert scale with 26 items. The results of the instrument validation test are presented in table 2 below.

The results of the validation test in Table 1 show that the reliability of the instrument 1.00 is at a very good level. This is also supported by a split index value that can organize items into 18 sections, from very high, high, medium, low and lowest. Furthermore, the unidimensional estimation through Principal Component Analysis (PCA) identified the raw variance value described with a size of 41.9%, this means that the unidimensional condition of the instrument has been achieved (> 40%; Boone, Stever, & Yale, 2014; Linacre, 2011) and the construct on the instrument is representative for measuring the condition of student anxiety in writing.

Furthermore, the categorization of fit and misfit items on the writing apprehension scale can be demonstrated by comparing the MNSQ OUTFIT value of each item with an average MNSQ OUTFIT value of +1.00 logit, meaning that 26 items were given to respondents, all items on each writing apprehension scale nothing is misfit. The following conveys the quality of stress and anxiety instruments using pictures.

Table 2. Instrument Validation Test Results

Estimation	Stress
Item Reliabilities	1.00
Person Reliabilities	.88
Cronbach alpha (KR-20)	.88
Separation index of Item	18.60
Separation index of Person	2.76
Mean Item	0.00
Mean Person	-.86
Mean INTFIT MNSQ Item	1.00
Mean INFIT MNSQ Person	1.02
Mean OUTFIT MNSQ Item	1.01
Mean OUTFIT MNSQ Person	1.01
Raw Variance Explained by measures	41.9 %
Value Minimum EXTREME Person	3

Measuring

The research data were analyzed using the Rasch model using 2 analyzes on the Rasch model, namely: 1) testing the condition of students' anxiety in writing using variable maps, and 2) descriptive testing using subtotal specifications (Alagumalai, Curtis, & Hungi, 2005; Bond & Fox, 2015; Engelhard Jr & Wind, 2017; Ifdil et al., 2018; Syahputra, Sandjaja, Afdal, & Ardi, 2019; Syahputra, Prayitno, Syahniar, Karneli, & Hariyani, 2019).
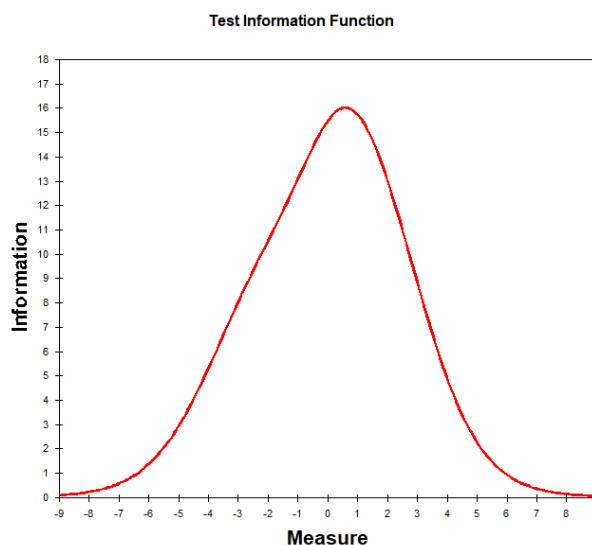

Figure 1. Test Information Function

Result and Discussion

To achieve the research objectives, there are 3 analyzes, namely: 1) testing individual stress and anxiety conditions using variable maps, and 2) testing perceptions based on demographics using Differential Item Functional (Alagumalai et al., 2005; Alizamar, Syahputra, Ardi, & Trizeta, 2018; Bond & Fox, 2015; Boone et al., 2014; Linacre, 2011).

1. The Condition of Writing Anxiety in Indonesia

Figure 2 shows the variable stress maps, the Wright Maps on the left explains the respondent's writing anxiety condition, and the Wright Maps on the right explains the ability of the items. The Wright Maps on the left shows that the average respondent does not show a severe condition for writing anxiety, as can be seen from the mean measure value of -.86, meaning that the respondent's writing anxiety condition is in a mild state. While the Wright Maps on the right shows the quality of the items, from the Wright Maps image on the right, it is divided into two measurement conditions, first for the condition of writing anxiety in the classroom environment (code 'K') and second for general writing anxiety (code 'U'). . Item U18 (-2.12 logit) is the easiest to answer/approve by respondents because the statement of the item is often felt by all respondents, while the statement of an item U18 is "I feel that other people's writing skills are better than mine." In addition, K5 is also easy to answer/approve by respondents because the statement of the item is often felt by all respondents, while the statement of an item K5 is "I have difficulty expressing ideas in writing courses."
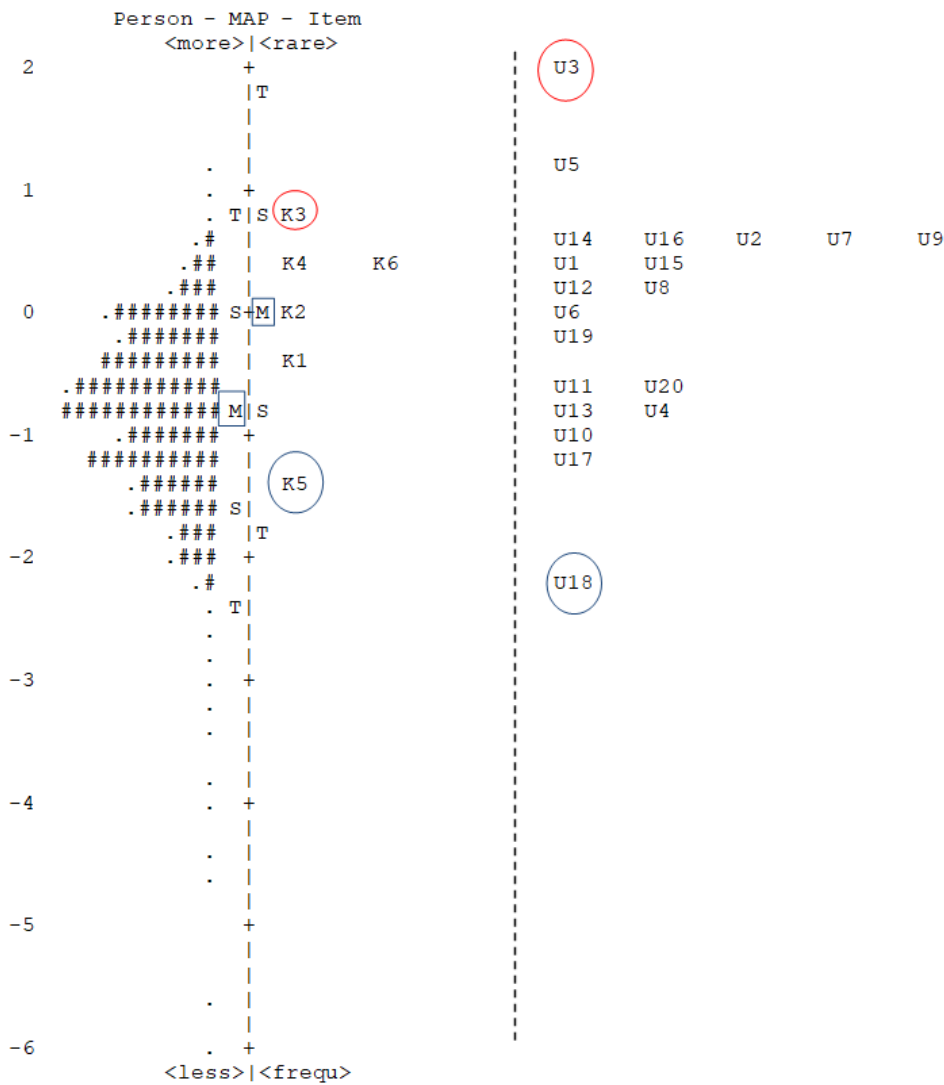
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           .##    | K4      K6             U1    U15
           .###   |                        U12   U8
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           .######  |                      U19
           ########  | K1
          .#########|                      U11   U20
          ########### M|S                  U13   U4
        -1  .#######  +                    U10
           ##########  |                    U17
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Figure 2. Variable Maps of Writing Anxiety

Meanwhile, item U3 (+2.01 logit) is the most difficult item to answer/approve by respondents because the statement of the item is rarely/not perceived by all respondents, while the statement of item U3 is "I hope to write down ideas". In addition, the K3 item is also difficult to answer/approve by the respondents because thestatement is rarely/not felt by all respondents, while the K3 item reads "Submitting the results of writing makes me feel comfortable".

2. Writing Anxiety Conditions Based on Demographics

Table 2. Descriptive Test Results of Writing Anxiety Based on Gender

Person Count	Mean Measure	S.E. Mean	Median	MNSQ		Model Separation	Model Reliability	Code
				INFIT	OUTFIT			
999	-.86	.03	-.81	1.02	1.01	2.76	.88	*
211	-.82	.06	-.73	1.19	1.18	2.89	.89	L
788	-.87	.03	-.81	.97	.97	2.73	.88	P

Explanation:
L   = Male
P   = Female

Table 2 shows a total of 999 respondents (male = 214 and female = 788). In table 2, the average mean measure for men is smaller than women, meaning that men are slightly more anxious when writing than

women. In contrast to the S.E Mean value that males (.06) are greater than females (.03), it means that the average error or deviation occurs in the male sample. However, the reliability of men is slightly higher than that of women, meaning that the quality of answers given by male and female respondents is very good. Furthermore, to assess which responses are fit and misfit, it can be shown by comparing the average MNSQ OUTFIT value with the MNSQ OUTFIT value (with a mean square value of 1.0 or with an ideal range of 0.5> MNSQ <1.5), for male and female the average INFIT/OUTFIT MNSQ is still in the ideal range. Furthermore, the condition of students' writing anxiety based on ethnicity in Indonesia is presented in table 3 below.

Table 3. Descriptive Test Results of Students' Writing Anxiety Based on Ethnicity

Person Count	Mean Measure	S.E. Mean	Median	MNSQ		Model Separation	Model Reliability	Code
				INFIT	OUTFIT			
999	-.86	.03	-.81	1.02	1.01	2.76	.88	*
201	-.64	.05	-.59	.97	.97	2.56	.87	B
7	-.98	.38	-1.03	.84	.84	3.17	.91	G
294	-.87	.05	-.73	.97	.96	2.85	.89	J
106	-.99	.08	-.96	1.03	1.02	2.57	.87	K
118	-.89	.07	-.81	1.07	1.07	2.74	.88	M
5	-1.74	.60	-1.19	1.38	1.24	3.63	.93	R
148	-.84	.07	-.81	1.04	1.03	2.82	.89	S
120	-1.05	.07	-.99	1.12	1.11	2.51	.86	U

Explanation:

B	= Betawi	M	= Minang	K	= Batak
G	= Bugis	R	= Banjar	U	= Melayu
J	= Jawa	S	= Sunda		

Table 3 shows that the most dominant respondents came from Javanese (n=294) and Betawi (n=201) ethnic groups. However, those who gave the best responses came from ethnic Banjar (n=5) and Bugis (n=7), it can be seen from the reliability value of .93 to .91 compared to other reliability values, but it cannot be concluded because the number of Banjar and Bugis students are not yet representative. When viewed from the condition of anxiety related to writing, it shows that the Betawi ethnicity, totaling 201 students, tends to be more anxious in dealing with writing situations compared to other ethnicities, as can be seen from the mean measure value of -0.64 logit. Meanwhile, the respondents who felt least anxious were from Banjarese ethnicity (-1.74 logit; n=5), but they could not be used as a benchmark because the respondents were not representative. Furthermore, the condition of students' writing anxiety based on the province of residence in Indonesia is presented in table 4 below.

Table 4. Results of the Descriptive Writing Anxiety Test by Province in Indonesia

Person Count	Mean Measure	S.E. Mean	Median	MNSQ		Model Separation	Model Reliability	Code
				INFIT	OUTFIT			
999	-.86	.03	-.81	1.02	1.01	2.76	.88	*
11	-1.15	.12	-1.19	1.15	1.15	.87	.43	A
218	-1.00	.05	-.96	1.05	1.04	2.69	.88	B
89	-.97	.09	-.96	1.03	1.03	2.84	.89	C
18	-1.49	.21	-1.47	1.19	1.16	2.77	.88	D
59	-.99	.13	-.88	1.07	1.03	3.13	.91	E
24	-.81	.14	-.77	1.04	1.05	2.18	.83	F
9	-1.12	.22	-.96	1.27	1.26	2.02	.80	G
18	-.76	.13	-.77	1.24	1.24	1.66	.73	H
289	-.69	.04	-.66	.98	.98	2.52	.86	I
242	-.79	.05	-.73	.96	.96	2.90	.89	J
8	-.43	.20	-.49	1.18	1.22	1.72	.75	K
11	-1.08	.17	-.81	1.03	1.03	1.65	.73	L
3	-1.92	1.01	-1.03	1.08	.91	4.15	.95	M

Explanation:

A	= Nanggroe Aceh Darussalam	G	= Bengkulu	
B	= Sumatera Utara	H	= Banten	
C	= Sumatera Barat	I	= Jakarta	
D	= Sumatera Selatan	J	= Jawa Barat	
E	= Riau	K	= Jawa Timur	
F	= Jambi	L	= Jawa Tengah	
		M	= Nusa Tenggara Timur	

Table 4 shows that the most dominant respondents came from the provinces of Jakarta (n=298), West Java (n=242) and North Sumatra (n=218). However, those who gave the best response were students from Riau Province with a reliability score (.91). Based on the students' writing anxiety condition, there were three provinces with the highest levels, namely: East Java (-.43 logit; n=8), Jakarta (-.69 logit; n=289), and West Java (-.79 logit; n= 242). Meanwhile, the respondents who were least anxious wrote that they were students from East Nusa Tenggara Province (-1.92 logit; n=3), but they could not be used as a benchmark because there were only three respondents. Apart from the provinces in East Nusa Tenggara, there is one province that is not afraid to write that can be used as a benchmark, namely: South Sumatra (-1.49 logit; n=18) and North Sumatra (-1.00 logit; n=218). Furthermore, the condition of students' writing anxiety based on majors in Indonesia is presented in table 5 below.

Table 5 shows that the most dominant respondents came from the Department of Islamic Guidance and Extension (n=509) and Islamic Education (n=230). However, those who gave the best response were students from the majors in Islamic guidance and counseling, Islamic education, and educational technology with a reliability score (.88). Based on the condition of writing anxiety, there are 2 majors with the highest levels, namely: economic education (-.43 logit; n=13) and guidance and counseling (-.44 logit; n=55), but the data is not representative as seen from the low value of separation index (1.62 and 1.98). Meanwhile, the respondents who were least worried about writing students who came madrasah the madrasah ibtidaiyah teacher education department (-1.55 logit; n=13), but could not be used as a benchmark because the respondents were not representative.

Table 5. Descriptive Test Results of Writing Anxiety Based on Major

Person Count	Mean Measure	S.E. Mean	Median	MNSQ		Model Separation	Model Reliability	Code
				INFIT	OUTFIT			
999	-.86	.03	-.81	1.02	1.01	2.76	.88	*
509	-.79	0.4	-.73	.98	.98	2.77	.88	A
55	-.44	.08	-.32	1.07	1.08	1.98	.80	B
230	-1.01	.05	-.96	1.05	1.04	2.68	.88	C
28	-.94	.14	-1.00	1.07	1.06	2.38	.85	D
13	-1.55	.22	-1.60	1.00	.99	2.39	.85	E
69	-1.03	.10	-.96	1.00	.99	2.72	.88	F
9	-1.44	.13	-1.35	1.12	1.16	.80	.39	G
26	-.69	.13	-.63	1.20	1.21	2.26	.84	H
13	-.43	.15	-.59	.87	.89	1.62	.72	I
8	-.75	.29	-.88	.91	.88	2.57	.87	J
33	-1.09	.19	-.96	1.15	1.09	3.38	.92	K
6	-.81	.31	-.63	1.23	1.23	2.29	.84	L

Explanation:
A = Islamic Guidance and Counseling
B = Guidance and Counseling
C = Islamic education
D = Technical Information
E = Madrasah Ibtidaiyah Teacher Educationh
F = Education technology
G = Tarbiyah and teacher concentration history
H = Communication Da'wah
I = Economic Education
J = Japanese Language Education
K = Islamic Education Management
L = Sports Education

The results show the tendency of students from various majors in Indonesia not to experience high anxiety in writing, this is indicated by the low value of the mean measure, Islamic as: Islamic Education Management (-1.09 logit); Educational Technology and Islamic and Islamic Religious Education (-1.01 logit). Furthermore, the condition of students' writing anxiety based on universities in Indonesia.

Table 6. Descriptive Test Results of Writing Anxiety Based on University

Person Count	Mean Measure	S.E. Mean	Median	MNSQ		Model Separation	Model Reliability	Code
				INFIT	OUTFIT			
999	-.86	.03	-.81	1.02	1.01	2.76	.88	*
214	-1.00	.05	-.88	1.04	1.03	2.58	.87	A
565	-.80	.03	-.73	.99	.99	2.71	.88	B
14	-.77	.17	-.77	.87	.86	2.07	.81	C
5	-1.52	.09	-1.52	1.34	1.41	2.25	.84	D
40	-1.00	.13	-.92	.95	.94	2.64	.87	E
8	-1.00	.34	-1.35	1.07	1.08	3.07	.90	F

Person Count	Mean Measure	S.E. Mean	Median	MNSQ		Model Separation	Model Reliability	Code
				INFIT	OUTFIT			
37	-1.02	.14	-.96	1.09	1.09	2.81	.89	G
11	-.89	.31	-.88	1.14	1.14	3.39	.92	H
51	-.79	.12	-.73	1.15	1.15	3.03	.90	I
12	-.14	.18	.08	1.14	1.15	2.09	.81	J
31	-1.06	.20	-.96	1.17	1.11	3.46	.92	K
11	-.82	.21	-.52	.84	.84	2.20	.83	L

Explanation:

A	= UNINDRA	G	= UPI	
B	= UHAMKA	H	= UNJA	
C	= UINSU	I	= UNRI	
D	= UNP	J	= UIKA Bogor	
E	= UPGRIP	K	= UIN SUSKA RIAU	
F	= UIN IB Padang	L	= UPI YPTK Padang	

Table 6 shows that the most dominant respondents came from UHAMKA (n=565) and UNINDRA (n=214). However, those who gave the best response were students from UNJA and UIN SUSKA Riau with reliability scores (.92) and (.92). Based on the condition of writing anxiety, there is one university that has the highest level, UIKA Bogor (-.14 logit; n=12), but the data is not representative as seen from the small separation index value of 2.09. The results show the tendency of students from various universities in Indonesia not to experience high anxiety in writing, this is indicated by the low value of the mean measure, such as: UIN SUSKA Riau (-1.06 logit); UPI (-1.02 logit); UNINDRA (-1.00 logit); UPGRIP (-1.00 logit); and UIN IB Padang (-1.00 logit). Furthermore, the condition of students' writing anxiety based on their writing experience is presented in table 7 below.

Table 7. Descriptive Test Results of Writing Anxiety Based on Writing Experience

Person Count	Mean Measure	S.E. Mean	Median	MNSQ		Model Separation	Model Reliability	Code
				INFIT	OUTFIT			
999	-.86	.03	-.81	1.02	1.01	2.76	.88	*
153	-.86	.06	-.81	1.09	1.09	2.40	.85	G
165	-1.13	.06	-1.11	1.00	1.00	2.48	.86	P
123	-1.16	.08	-1.11	1.02	1.02	2.90	.89	S
558	-.71	.03	-.66	1.00	1.00	2.76	.88	T

Explanation:

G	= Not completed	S	= In process
P	= Finish	T	= Never

Table 7 shows that the most dominant respondents came from students who never had writing experience (n=558). However, those who gave the best responses were students who had experience writing (in progress; n=123; -1.16 logit) with a reliability score (.89).

Discussion

Item U3 (+2.01 logit) is the most difficult item to answer/approve by respondents because the statement of the item is rarely/not felt by all respondents, while the statement of item U3 is "I hope to write down ideas". In addition, the K3 item is also difficult to answer/approve by the respondents because the statement is rarely/not felt by all respondents, while the K3 item reads "Submitting the results of writing makes me feel comfortable". These findings indicate that students with high anxiety performed differently than students with low anxiety on standardized writing tests, and low anxiety significantly performed better on comprehensive tests of grammar, mechanics, and greater attention to writing skills (Daly, 1978).

Based on table 7, it can be said that students who have never written will experience more writing anxiety than students who have written. Thus, students who have written but have not finished writing a paper will also experience writing anxiety. Difficulty getting started is one of the causes of the low interest in writing students. This condition is not only experienced by novice writers (students), senior writers (lecturers) also feel it. For example, difficulty finding topics and supporting theories, both of which have a big influence on the

desire to start writing. In addition, there is a lack of a formal structure to initiate writing, thus affecting the momentum and productivity of writing (Gainen, 1993; Hale & Pruitt, 1989; Morss & Murray, 2001; Murray & Newton, 2009). In line with writers' groups in Australia who use guides to write many scientific papers (Silva, 2007), in the guides there are strategies that can improve the results of scientific work. According to Bandura (1986) social cognitive theory, writing self-efficacy affects students' academic writing performance because self-efficacy beliefs affect their choice, effort and determination in the writing process.

In addition, the low level of student language has an impact on student behavior in writing or the tendency of students to plagiarize. The Committee on Publication Ethics (COPE), defines plagiarism as the use of ideas that are not referenced from others or are not published (COPE, 2016). The majority of respondents who are aware of the term plagiarism are 86%, while 14% show complete ignorance of plagiarism (Punyani & Deshpande, 2016). Although the percentage that do not know about plagiarism is small, they have committed serious malpractice and are contrary to the basic principles of research ethics. So, writers must be prepared to explain the order of the list of authors (Journals, 1997; Martín, 2008) which is inserted at the beginning of the sentence or at the end of the sentence of the article that explains the meaning of the order of authorship (Hwang et al., 2013). Genç & Yaylı (2019) explaining the specific steps of the writing process, such as using correct grammar for writing, brainstorming, and organizing ideas is also provocative. The need for the role of guidance and counseling to prevent student anxiety in writing through guidance and counseling programs to increase student interest in writing scientific papers. One of the services that can be provided is content mastery services and the formation of study groups, which are carried out in the form of workshops/trainings and writing group guidance. The program cooperates with the campus to run it, as for the guidance and counseling programs that can be provided by universities in Indonesia, namely:

a. Workshop/coaching clinic

Training to increase the understanding of writers/students, while the training that can be provided is in the form of research methodology, analytical techniques, discussion of scientificRepeated Word articles, writing ethics, and the tools used. In line with Punyani & Deshpande (2016) they conducted research on increasing writers' awareness of concepts in writing scientific publications.

b. Author group

The group of writers consisting of various fields of science, with many fields of science will gain a lot of understanding and many ideas and collaborate on strategies from various fields of science to solve a problem. Wardale et al. (2015) stated about its success in increasing scientific publications through a group of writers. The group scheduled to meet weekly for three hours in a specially reserved room to discuss research ideas for the purpose of writing.

Conclusion

The findings show that students who have never written will experience more writing anxiety than students who have written. Thus, students who have written but have not finished writing a paper will also experience writing anxiety. Based on the condition of writing anxiety, there are two majors with the highest writing anxiety, namely: economic education (-.43 logit) and guidance and counseling (-.44 logit), but the data is not representative as seen from the low value of the separation index (1.62 and 1.98).). Another finding shows the tendency of students from various universities in Indonesia not to experience high anxiety in writing, this is indicated by the low value of the mean measure, such as: UIN SUSKA Riau (-1.06 logit); UPI (-1.02 logit); UNINDRA (-1.00 logit); UPGRIP (-1.00 logit); and UIN IB Padang (-1.00 logit). Based on the findings, there is a need for intervention from a counselor or psychologist to reduce writing anxiety by making a WEBINAR series program for students. The results of the research can be used by future researchers to design training that focuses on improving students' writing competence.

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