

An Experiment of Public Speaking Anxiety on College Students

Reyhan Gufriyansyah and Maya Khairani

Department of Psychology Faculty of Medicine, Universitas Syiah Kuala, Indonesia

Keywords: Public Speaking, Public Speaking Anxiety, Anxiety, College Student.

Abstract: Becoming a student in the field of health and service requires skills of public speaking. Students are trained to speak in public in order to present their project in front of the class, give opinions in the forum, give instructions to many people, etc. Unfortunately, in several occasions, there are students who showed some anxiety symptoms such as sweating, tension, trembling, nervousness, and pale face. In this study, we aimed to explore the level of public speaking anxiety on 97 students (54 psychology students, and 43 medical students). Data were collected with PRPSA (Personal Report of Public Speaking Anxiety) to identify the categories of public speaking anxiety. It was known that 47.4% of students had low public speaking anxiety, 48.5% in moderate category of public speaking anxiety, and only 4.1% in the high category of public speaking anxiety. Then, 54 psychology students were investigated of their public speaking anxiety based on listener's characteristic. Result showed that there was the difference of public speaking anxiety based on listener's characteristic on psychology students, the students who spoke in front of the listeners with higher educational level were more anxious than those who spoke in front of the listeners with lower educational level.

1 INTRODUCTION

Students in academic field are required to develop their public speaking soft skills. Moreover, the students in social and medical majors who are required to have public speaking skill in learning or practicing process should be able to speak in front of audiences. Gregory (2010) defines public speaking as an oral presentation which explains things to listeners. Jaffee (1995) previously also explains that public speaking is a condition in which an individual prepares and presents in front of a group of listeners such as a presentation, a discussion and arguing in front of the class. An ability to speak in front of public is really helpful for students in learning process.

However, practically, many psychology students consider public speaking as a threatening matter. When those students are in threatening situation, the anxiety will emerge which can be seen from anxiety symptoms. According to Bucklew (1980), the anxiety symptoms can be seen from two aspects, (1) psychological aspects; being tense, confused, worry, and difficult to concentrate, and (2) physiological aspects; difficult to sleep, heart beating, sweating, trembling and nausea. In addition, Spielberger

(1966) mentions several symptoms of anxiety as follows (1) psychological symptoms; difficult to arrange idea or convey words like giving a speech in public, (2) physiological symptoms; trembling body, sweating on palm, forehead and neck, red face, faster hear beat, and higher blood pressure, and (3) common behavioral symptoms; walking around a room, not being able to sit for long time, smoking continuously and not being able to be rilex.

It is proven by the result of a survey about anxiety symptoms conducted based on the symptoms proposed by Bucklew (1980), Nevid, Rathus and Greene (2005) and Spielberger (1966) to 30 students of Psychology Department, Faculty of Medicine, University of Syiah Kuala, the result can be seen in figure 1.

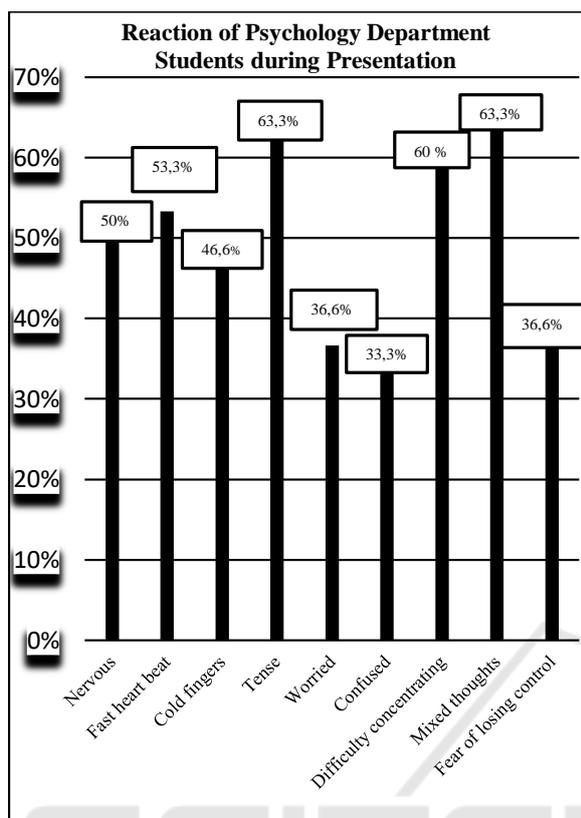


Figure 1: Result of a survey on Psychology Department students' reaction during presentation

According to the result above, some symptoms frequently emerge from the students like getting tense (63.3%), mixed thoughts (63.3%), difficulty concentrating (60%) and fast heart beat (53.3%). The causes of being anxiety among students when speaking in public are caused by fears to look stupid and be laughed by listeners.

Being anxious to speak in public is one of state anxiety forms which refer to fear, being tense, nervous or worried along with activation of autonomous system (Spielberger, 1972). Moreover, Rakhmat (2002) explains that being anxious to speak in public as a negative reaction in form of anxiety occurs on individual during communication, either personal or public communication. Anxiety of public speaking is social anxiety emerging in real form during oral presentation. McCroskey (1984) uses communication apprehension term to describe the level of fear and individual anxiety which are related to communication activity with a person or many audiences. Individual anxiety during public speaking could hamper individual's success in academic, especially for university students, it will hamper

learning process of the students (Bodie in Grewe, 2010; Yusuf, 1990).

Witt, Brown, Roberts and Weisel (2006) find that a person shows higher anxiety level after speaking in public than before it. It happens because the person is anxious to what he/she has conveyed in public. Sawyer and Behnke (1990) explain that the level of speaker's self-monitoring (an individual's effort to behave on social situation) and the reaction of listeners contribute to speaker's anxiety during public speaking. Furthermore, Pertaub, Slater and Barker (2006) state that there is a difference of anxiety when an individual conducts a presentation before different listeners. The listeners with negative behavior (disrespectful) tend to make the speaker more anxious than those with static behavior (ordinary) and those with positive behavior (respectful) do.

Beatty (in Witt, et al., 2006) found a significantly positive correlation between speaking in public and situation during speaking, clarity of speaker during public speaking, prior anxiety experience of public speaking and the difference between speaker and listener. The more speaker and listener become different, the more speaker's anxiety gets affected (MacIntyre & Thivierge, 1995), such as the difference of educational background between speaker and listener.

To be a good speaker, an individual should recognize listeners' characteristics. According to Gregory (2010), there are seven characteristics of listeners that should be concerned on, one of which is educational background. The educational background of listeners should be concerned by speaker in order to make the message easily accepted by the listeners. Speaker's status which is lower than listeners contribute to speaker's anxiety during public speaking (Beatty in Witt, et al., 2006), therefore listeners' status is considered having a role on high and low of individual's anxiety during public speaking.

It shows that listeners' characteristics are a factor that affects on university student who experiences anxiety during speaking in front of the class. Based on the phenomena above, this research aimed to see public speaking anxiety based on listener's characteristics on college students.

2 LITERATURE REVIEW

2.1 Public Speaking Anxiety

McCroskey (1984) reveals that public speaking anxiety as part of communication apprehension, the level of fear or individual's anxiety related to communication activity with a person or many people. Furthermore, Wrench, Brogan, McCroskey, and Jowi (2008) say that public speaking anxiety is an individual's tendency to be obstructed when he/she imagines himself/herself communicating with a person or many people.

2.2 The Characteristics of Listeners

West (2008) defines listeners as audiences or a group of people who have motivation, decision and preference. Meanwhile, Cangara (2009) defines listeners as audiences who are actors of communication process. Audience is usually called as a receiver, target, reader, viewer, audience, decoder, or communicant. According to Gregory (2010), listener is a receiver of messages from speaker.

According to Gregory (2010), there are seven characteristics of listener that should be concerned to, namely: educational background, age, sex, job status, religious affiliation, social and economical status, and international listener (different country). Of 7 characteristics above, this research focuses on educational background of listener. Gregory (2010) explains that searching for information about educational level of listener should be done by speaker in order to make the language during message delivery easily accepted and corresponding to listener's knowledge. Educational background makes a speaker prepare the delivered message that is corresponding to listener's educational level. It is conducted to make listener understand the message. For instance, if the educational level of listener is lower than that of speaker, the speaker should deliver an understandable message corresponding to the knowledge of listener in order to avoid misunderstood words by the level of listeners.

3 RESEARCH METHOD

3.1 Participants

97 students (43 medical students and 54 psychology students) were involved in this research. Later on, the 54 students of psychology (batch 2013) were involved in an experiment to see the effect of listener on participants' anxiety condition.

3.2 Instrument

The data in this research were collected through Personal Report of Public Speaking anxiety (PRPSA) scale which was arranged by McCroskey (1970) containing 34 items. This scale was adapted by the researchers through expert review and try out process toward 60 subjects and the reliability score of the adaptation was $\alpha=0.912$.

3.3 Prosedures

This research ran two steps. First, all participants from two departments (Medicine and psychology) filled PRPSA scale. Later on, the psychology students took part in an experiment by conducting presentation in front of 20 listeners. Those psychology students were divided into two groups, control and experiment groups. The control group conducted a presentation in front of the listeners who were their junior. Meanwhile, the experiment group conducted a presentation in front of their lecturers and alumni. After the participants conducted the presentation, they were asked to fill PRPSA scale.

4 RESULT

In PRPSA scale, there are 3 categories of anxiety, low, moderate, and high, which were obtained from the result of calculating PRPSA score by using the formula below:

$$\text{PRPSA} = 72 - \frac{\text{total of unfavorable score}}{\text{total of favorable score}} \quad (1)$$

Based on the norm above, the researchers categorized the scores of each subjects on each research group. The categorization result can be seen in the table below:

Table 1: Categorization of Public Speaking Anxiety in medicine and psychology students

Score	Category	Total			
		Medical	%	Psychology	%
$X < 98$	Low	15	34.9%	31	57.4%
$98 \leq X < 131$	Moderate	27	62.8%	20	37%
$131 < X$	High	1	2.3%	3	5.6%

54 psychology students was later on divided into two groups (experiment group; conducting presentation in front of higher level audiences, and control; conducting presentation in front of lower level audiences). The comparison of public speaking anxiety score of both groups can be seen in figure 2.

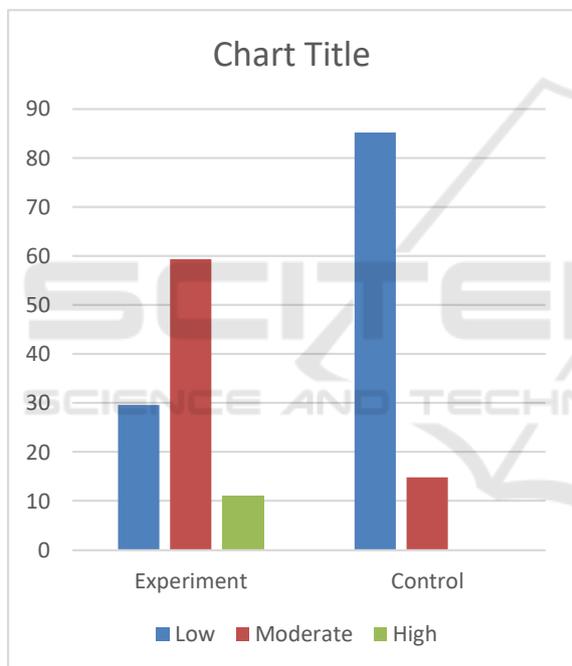


Figure 2: Comparison of Public Speaking Anxiety Score between Experiment group and control group.

The categorization result of the experiment group showed that majority of the subjects in the experiment group had moderate level of public speaking anxiety for 59.3% (16 students), meanwhile, the others were at low level for 29.6% (8 students) and those who were at high category were for 11,1% (3 students). The result of control group categorization showed that 85.1% (23 students) were at low level of public speaking anxiety, while 14.8% (4 students) were at moderate and 0% of high category.

4.1 Assumption Test

Result of assumption test showed that the data were normally and homogeneously distributed. It can be seen from normality test with the significant score of 0.807 ($p > 0.05$). While homogeneity test gained significant score for 0.708 ($p > 0.05$).

4.2 Hypothetical Test

Analysis result using independent sample t-test showed t value ($df = 4.05$) ($p < 0.05$) and $p = 0.000$ ($p < 0.05$) which meant that there were the difference of public speaking among students of Psychology Department, Faculty of Medicine, University of Syiah Kuala.

4.3 Cohen Test

Analysis result of Cohen Kappa test showed that the score of 0.013 meaning that the difference in this study is at low category. So that, the hypothesis of this study is accepted.

5 DISCUSSION

This study was conducted to know the difference between public speaking anxiety based on characteristics of listeners on the students of Department of Psychology, Faculty of Medicine, The University of Syiah Kuala. Based on result, the hypothesis is accepted, it means there is the difference of public speaking anxiety based on characteristic of listeners on the students of Department of Psychology, Faculty of Medicine, The University of Syiah Kuala.

McCroskey (1984) calls public speaking anxiety as communication apprehension meaning the level of fear or anxiety of an individual related to communication activity with a person or many people. Jackson and Latane (in MacIntyre &

Thivierge, 1995) state that speaking in front of audiences is one of anxiety triggers. MacIntyre and Thivierge (1995) explain that listener's characteristics could influence how speaker anticipate anxiety during public speaking.

This present study result shows that speaking in front of listeners who have higher education could make an individual feel more anxious than speaking in front of those who have lower education. It is proven by mean obtained from PRPSA scale measurement, it shows that individuals speaking in front of listeners with higher level education obtain score of 103.63, meanwhile, those speaking in front of listeners with lower education obtain score of 81.96. Moreover, categorization result of the experiment group shows that most students in the experiment group (51.8%) are at moderate level of public speaking anxiety, while 37.1% of them are at low level, and the rests (11.1%) are at high level, on the other hand, categorization result of control group shows that most of control group students (85.2%) are at low level of public speaking anxiety, while the rests (14.8%) are moderate. It explains that speaking in front of higher level education listeners would make the individuals feel more anxious that speaking in front of lower level education listeners.

Public speaking anxiety is social anxiety emerging in real form when doing presentation orally. According to Ramaiah (2003), anxiety is a normal reaction toward a stressing situation in one's life and it would not stay long. Anxiety can positively impact an individual, if he/she can motivate him/herself to learn well. However, over anxiety, especially during public speaking, will hamper an individual to show self-capacity. The difference of anxiety impact on people is caused by the difference of each person. The characteristic differences will determine individual's response toward stimuli which become sources of anxiety, therefore each individual will differently respond even though having similar source of anxiety (Wahyuni, 2015).

An individual experiences anxiety when facing public speaking that emerges a stimulus in form of a forum in certain capacity, there are authority figure and stimulus in form of listeners' view on the speaker. The anxiety could also be caused by negative consequences from society like criticism, insult, and bad reputation as part of negative evaluation of neighborhood. An individual is afraid of being called stupid, boring, offensive, rude, uninteresting, diffident, not charismatic and so on. Anxiety could also emerge because an individual observes or interact with the society by responding

fear, verbal anxiety, expressing worry and others comment the way of the individual speak in public (Monart & Kase in Haryanthi & Tresniasari, 2012). The lecturers, alumni and last year students who become the listeners for experiment group are considered as authority figure, it makes the individuals feel threatened because they feel stupid, criticized, insulted, bad reputation and afraid of making mistake during presentation of material. Total listeners in experiment group are 20, consisting of 4 lecturers, 1 alumnus, and 15 last year students. Based on Raja's findings in 2017, the size of the audience can affected the public speaking anxiety level.

Meanwhile, the individuals in control group have lower anxiety during presenting material because they feel that they are knowledgeable and master the material better than the listeners who are their junior or their classmates, so that those in experiment group look more anxious than those in control group during public speaking in front of the listeners. Total listeners in control group are 20, all of whom are the youngest batch in the department, batch 2015. It shows that the presence of significant effect toward low and high individual's anxiety during public speaking with different listeners' characteristic (Beatty, in Witt et al., 2006).

The result is also enforced by some responses of samples to the researcher after the research process. Samples in experiment group responded that they were rushed in preparing material, it made them less master the material hence influencing their readiness and anxiety when delivering the message. In addition, the samples experienced more anxiety when speaking in front of senior, alumni and lecturers because they were afraid of their improper explanation, and they felt more anxious because they were afraid of being questioned by the listeners after delivering the message. Besides it, confidence level also can affected the public speaking anxiety (Raja, 2017). Furthermore, some samples in control groups also said that they felt rilex after presenting a material in front of listeners who are their junior (batch 2015) because they felt that they have more ability than the listeners. These findings showed that some action need to take in order to overcome the public speaking anxiety problems. There are some strategies that can be applied to the students or anyone whose experience public speaking anxiety, for instance personal counseling, training and coaching, and virtual exposure treatment (Raja, 2017).

In this research process, the researchers are aware of the limitation during conducting this

research, so that there are some feedbacks from the researchers for future research. First, presentation material from subjects should be submitted first before presentation starts, the participants are asked to present as the prepared material without adding other materials. Second, preparing for more assistants to help research process such as becoming operator, time keeper, and calling participants. In addition, it is important to prepare non-technical things to minimize interrupting matters during research.

Suggestion for future researcher who wants to study the similar topic is to concern on several things before conducting experiment research, namely obvious regulation and procedures during the research in order to minimize things which could influence the research. Moreover, it is expected for future research to be able to connect public speaking anxiety with other listener's characteristics.

6 CONCLUSION AND SUGGESTION

The research result shows that there is correlation between public speaking anxiety based on characteristic of listener on student of Department of Psychology, Faculty of Medicine, University of Syiah Kuala. Based on the result, there are some suggestions that the researchers propose to be considered.

1. For Students
For students, especially students of Department of Psychology, Faculty of Medicine Unsyiah, it is suggested that they have to prepare themselves by more mastering material before speaking publicly because mastering material that will be delivered is very helpful to ease message delivery when speaking in public.
2. For Educational Institution
Educational Institution has to improve ability and public speaking-related educational program for students in order to make the students have the ability of public speaking for their study, during among society, and for entering work field.
3. For Future Researcher
Future researchers are expected to conduct further research about public speaking anxiety by considering other public speaking-influencing variables. We also expect the next researcher to be able to prepare better and deep experimental research by concerning things which could hamper research process.

REFERENCES

- American Psychological Association. (2013). *APA Guidelines for The Undergraduate Psychology Major*. Washington: American Psychological Association
- Asosiasi Penyelenggara Pendidikan Tinggi Psikologi Indonesia. (2015). *Surat Keputusan Asosiasi Penyelenggara Pendidikan Tinggi Psikologi Indonesia S1*. website: ap2tpi.or.id
- Azwar, S. (2013). *Penyusunan skala psikologi (edisi kedua)*. Yogyakarta: Pustaka Pelajar.
- Azwar, S. (2013). *Realibilitas dan validitas (edisi keempat)*. Yogyakarta: Pustaka Pelajar.
- Barmawi & Mardiaty. (2013). *Self-Efficacy Dan Kecemasan Berbicara Di Depan Umum Pada Mahasiswa Fakultas Psikologi Universitas Muhammadiyah Aceh*. *Jurnal Ilmiah Psikologi An Nafs*, 3 (1)
- Berger, B., McCroskey, & Richmond, V. (1984). *Communication Apprehension and Shyness*. Philadelphia: Lea & Febiger
- Bucklew. (1980). *Paradigma for Psychology: A Contribution to case History Analysis*. New York: J. B. Lippen Cott Company
- Cangara, H.H., (2006). *Pengantar Ilmu Komunikasi*. Jakarta: PT. Raja Grafindo
- Departemen Pendidikan Nasional. (2008). *Kamus Besar Bahasa Indonesia Pusat Bahasa Edisi Keempat*. Jakarta: PT. Gramedia Pustaka Utama
- Direktorat Jenderal Pendidikan Tinggi. (2015). *Jumlah Perguruan Tinggi*. Diunduh dari Direktorat Jenderal Pendidikan Tinggi website: <http://forlap.dikti.go.id/perguruantinggi/homegraphpt>
- Erlebach, A. C. (2004). *The Experience of Public Speaking Apprehension (PSA) in The Workplace [Thesis]*. Canada: The University of British Columbia.
- Fatma & Ernawati. (2012). *Pendekatan perilaku kognitif dalam pelatihan keterampilan mengelola kecemasan berbicara di depan umum*. *Talenta Psikologi*, 1 (1), 39-65
- Goldman, H. H. (2000). *Review Of General Psychiatry*. USA: McGraw-Hill
- Gregory, H. (2010). *Public Speaking for College & Career*. USA: McGraw-Hill
- Grewe, B. (2010). *Public Speaking Anxiety*. USA: University of Denver
- Haryanti & Tresniasari. (2012). *Efektivitas metode terapi ego state dalam mengatasi kecemasan berbicara di depan publik pada mahasiswa fakultas psikologi uin syarif hidayatullah jakarta*. *Insan*. 14 (1)
- Hudaniah & Dayaksini, Tri. (2006). *Psikologi Sosial*. Malang: UMM Press.
- Ibrahim, A. H. & Daud, N. M. (2013). *Public speaking anxiety in podcast aided language classes*. *World Applied Sciences Journal*. 21 (1): 12-18
- Idrus, M. (2009). *Metode penelitian ilmu sosial (2nd ed)*. Jakarta: Erlangga.
- Jaffee Clella Illes. (1995). *Public Speaking: A Cultural Perspective*. USA: Wadsworth Publishing Company.

- Kholisin. (2014). Kecemasan berbicara ditinjau dari konsep diri dan kecerdasan emosional. *Jurnal Ilmu Dakwah*. 34 (1)
- MacIntyre dan Thivierge. (1995). The effects of audience pleasantness, audience familiarity, and speaking contexts on public speaking anxiety and willingness to speak. *Communication Quarterly*. 43 (456)
- McCroskey, J. (1984). The Communication Apprehension Perspective.
- McCroskey, J., & Richmond, V. (1982). Communication apprehension and shyness: conceptual and operational distinctions. *Central States Speech Journal*. 33
- McDowell. (2006). *Measuring Health: A Guide To Rating Scales And Questionnaires*. New York: Oxford University Press
- Nevid, Rathus & Greene. (2005). *Psikologi Abnormal*. Jakarta: Penerbit Erlangga
- Orford, J. (1992). *Community Psychology: Theory and Practice*. England: John Wiley and Sons Ltd.
- Pertaub, D.P., Slater, M., & Barker, C. (2006). An Experiment On Public Speaking Anxiety In Response To Three Different Types Of Virtual Audience. London: University College London.
- Prakoso, B. (2014). Hubungan Antara Berpikir Positif Dengan Kecemasan Berbicara Di Depan Umum. [Thesis]. Surakarta: Universitas Muhammadiyah Surakarta.
- Raja, F. (2017). Anxiety level in students of public speaking: causes and remedies. *Journal of Education and Educational Development*. Vol. 4 (1): 94-110.
- Rakhmat, J. (2002). *Psikologi Komunikasi*. Bandung: PT Remaja Rosdakarya.
- Ramaiah, S. (2003). *Kecemasan, Bagaimana Mengatasi Penyebabnya*. Jakarta: Pustaka Populer Obor.
- Santrock, J. W. (2003). *Adolescence: Perkembangan Remaja*. Jakarta: Erlangga
- Sawyer, C. R., & Behnke, R. R. (1990). The role of self-monitoring in the communication of public speaking anxiety. *Communication Reports*, 12, 33-41
- Shagita, D. M., & Suprihatin, T. (2010). Self-efficacy dengan kecemasan komunikasi pada mahasiswa dalam mempresentasikan tugas di depan kelas. *Proyeksi*. 5 (1)
- Siswoyo, Dwi. (2007). *Ilmu Pendidikan*. Yogyakarta: UNY Press.
- Spielberger, C. D. (1966). *Anxiety and Behaviour*. New York: Academic Press.
- Spielberger, C. D. (1972). *Research On Stress And Anxiety*. Washington: Office Of Education
- Sugiyono. (2013). *Metode penelitian kuantitatif, kualitatif dan r&d*. Bandung: Alfabeta.
- Susanti & Supriyanti. (2013). Pengaruh expressive writing therapy terhadap penurunan tingkat kecemasan berbicara di muka umum pada mahasiswa. *Jurnal Psikologi*, 9 (2)
- Undang-Undang Republik Indonesia. (2003). Undang-undang No. 20 tahun 2003 tentang Sistem Pendidikan Nasional. Jakarta: Sekretariat Negara.
- Universitas Syiah Kuala. (2014). Fakultas dan Program Studi Universitas Syiah Kuala. Diunduh dari Syiah Kuala University website: <http://www.unsyiah.ac.id/>
- Universitas Syiah Kuala. (2014). Visi dan Misi Universitas Syiah Kuala. Diunduh dari Syiah Kuala University website: <http://www.unsyiah.ac.id/profil/visi-dan-misi>
- Universitas Syiah Kuala. (2015). Rencana Strategis Universitas Syiah Kuala 2012-2017, Revisi Mei 2015. Diunduh dari Syiah Kuala University website: <http://www.unsyiah.ac.id/>
- Wahyuni, E. (2015). Hubungan self-efficacy dan keterampilan komunikasi dengan kecemasan berbicara di depan umum. *Jurnal Komunikasi Islam*. 5 (1): 51-82
- Wahyuni, S. (2014). Hubungan antara kepercayaan diri dengan kecemasan berbicara di depan umum pada mahasiswa psikologi. *Ejournal Psikologi*. 2(1): 50-64
- West, R. L. H. (2008). *Pengantar Teori Komunikasi Analisis Dan Aplikasi Edisi 3*. Jakarta: Salemba Humanika.
- Witt, P.L, Brown K.C, Roberts J.B & Weisel J. (2006). Somatic anxiety patterns before, during, and after giving a public speech. *The Southern Communication Journal*, 71 (1). 87-100.
- Wrench, J.S., Brogan, S.m., McCroskey, J.C., & Jowi, D. (2008). Social communication apprehension: the itersection of communication apprehension and social phobia. *Human Communication*, 11:4 401-421
- Yaikhong, K. & Usaha, S. (2012). A measure of efl public speaking class anxiety: scale development and preliminary validation and reliability. *English Language Teaching*, 5 (12)
- Yusuf, P.M. (1990). *Komunikasi Pendidikan dan Komunikasi Intruksional*. Bandung: Remaja Rosdakarya.