# STUDENTS' COGNITIVE EMOTION REGULATION IN ENGLISH ONLINE LEARNING PROCESS

## Indriyani Astuti

Email: indrivaniastuti123@gmail.com

**Abstract.** The main goal of this research was to find out the students' cognitive emotion regulation in English online learning process at English Education Program of Muhammadiyah University of Bengkulu. Qualitative design was applied in this study. The data from respondents were collected through an interview adapted from Gamefski, 2010). The result of this research revealed that the students applied all of the nine cognitive emotion regulations. Self-Blame, Catastrophizing, Acceptance, and Rumination were the most commonly used out of the nine strategies. It was concluded that there were variations on the students' cognitive emotion regulation in English online learning process.

Key words: Cognitive Emotion Regulation, English Online Learning

#### A. INTRODUCTION

In this chapter, the writer presents the background of the research, the research question, the objectives of the research, the significances research, the limitation of the research, and the definition of key terms.

Cognitive emotion regulation is very important for learners because it is useful for regulating emotions that arise both consciously and unconsciously. Aldao, Sheppes, & Gross, (2015) state that emotional regulation strategies are very important to make adjustments. In this case, students must make adjustments from the face-to-face learning process to become online learning process. In this situation, the ability of emotional regulation strategies can help students overcome the problems they face (Wilson & Barnes-Holmes, 2014). Nine cognitive emotions regulations strategies according to Garnefski, Kraaij, & Spinhoven, 2002, were distinguished within the CERQ on theoretical and empirical bases; each referring to what someone thinks after the experience of threatening or stressful events. Self-blame refers to thoughts of putting the blame for what you have experienced one yourself. Other blame refers to thoughts of blaming what you have experienced on the environment or another person. Rumination or focus on thought refers to thinking about the feelings and thoughts associated with the negative event. Catastrophizing refers to thoughts explicitly emphasizing the terror of what you have experienced. Putting into perspective refers to thoughts of brushing aside the seriousness of the event/emphasizing relativity when comparing it to other events. Positive refocusing refers to thinking about joyful and pleasant issues instead of thinking about the actual event. Positive reappraisal refers to thoughts of creating a positive meaning to the event in terms of personal growth. Acceptance refers to thoughts of accepting what they have experienced and resigning themselves to what has happened and Refocus on planning refers to thinking about what steps to take and how to handle the negative event. So that the nine cognitive emotion regulation strategies provide important benefits to readers by providing more knowledge about how to regulate emotions.

Based on interviews with several eighth-semester students on June 11, 2020, it was found that some students could not regulate their emotions in the online learning process such as self blame, blaming others, rumination, and catastrophizing. But some students can also control their emotions such as acceptance, putting into perspective, positive refocusing, positive reappraisal, and refocusing on planning. So that researchers want to know broadly how students' cognitive emotion regulation in online learning.

Related to the discussion above, a number of researchers have found about Students' cognitive emotion regulation in online learning process. Petra Engelmann and Maria Bannert (2019 found that university students experience significant emotion regulation difficulties and suggest that they need intensive training in emotional regulation. Nadia Garnefski, Vivian kraajid, Philip Spinhoven (2001) suggest that cognitive coping strategies may be a valuable context of prevention and intervention. Ewa Domaradzka and Malgorzata Fajkowska(2018) The researchers found that reactive arousal anxiety was not related to any strategies, while regulative apprehension anxiety primarily predicted the use of rumination, which is presumably related to the cognitive structural components. Oftadehal, m., Mahmoodi-kahriz, B., Torabi Nami, M (2012) concluded that Other-blame was the strongest

negative predictor of depression followed by positive refocusing and positive reappraisal coping strategies. Other-blame, acceptance, self-blame, and catastrophizing strategies were in turn the strongest positive predictors for stress. Otherblame was positively correlated with age. Results indicated that other-blame and projection is the most applied coping strategy amongst our study subjects. Ghaleb Al-badareen(2016) The findings of this study showed that cognitive emotion regulation strategies had a significant joint effect and relative effect on academic achievement. It is hoped that this study will be beneficial to students and teachers in developing cognitive emotion regulation strategies for effective learning.

For the general population, academic stress does not generate such important pathologies. It is precisely in the educational context where the processes of emotional regulation are tested early on. However, it is clear that academic stress influences students, that it does it differently in each person, and that emotional regulation, through cognitive assessment, allows them to adapt their behaviour in accordance with perceived goals. Emotional regulation influences the cognitive processes involved in learning, from motivation, to the processing of information, to the establishment of significant links between new content and previous knowledge, and, of course, to the use of information or the demonstration of what has been learned through tests and exams (Fernández Cruz, 2015). This is why it is so important for educators and teachers to know the quality of cognitive assessment students carry out of the emotions in stressful academic situations and its effect on academic performance. This knowledge will be at the base of the prevention of academic failure.

#### **B. RESEARCH METHOD**

This chapter presents information about the design of the research, the subject of the study and the instruments.

#### **Research Design**

This study used descriptive research design. According to Maxwell( 1996:17), descriptive research is the research that focused on specific situations or people, and its emphasis is on words rather than numbers, which describes the real condition of the phenomena

#### The Subject of The Research

The subjects of the research were students semester II, IV, and VI of English education program in Muhammadiyah University Of Bengkulu.

#### Instrument

In this research, there were two kinds of instruments. The first, instruments of a set of questionnaire. There are 45 items classified from the cognitive emotions regulations in online learning. There are nine cognitive emotions regulation strategies, they are self-blame, Other blame, Rumination, Catastrophizing, Acceptance, Positive refocusing, Refocus on planning, Putting into perspective, Positive Reappraisal. The second, was interviewed the students for support the result of the data.

#### C. Result and Discussion

This chapter was presented the result of the research. This chapter was divided into was parts: the first part was the result of the data analysis and the second part was discussion. The discussion of this research was based on the result of the research and some theories related to research.

#### Result

This research was conducted to obtain information about Students Cognitive Emotion Regulation in English Online Learning Process at English Education Program of Muhammadiyah University of Bengkulu. This research was conducted by giving questionnaires to second, fourth, and sixth semester English students, and to strengthen the research results, the researchers also conducted interviews with 10 English students. Data collection was carried out on August 17, 2021. The questionnaire used was adapted from Garnefski et al., 2001 about cognitive emotion regulation, among others: Self Blame, Other Blame, Rumination, Catastrophizing, Acceptance, Positive Refocusing, Refocus on Planning, Putting Into Perspective and Positive Reappraisal.

No	Item	Always and Often		Criteria	Seldom and Never		Criteria
		F	%		F	%	
1	Self Blame	98	91	Always	9	9	Never
2	Other Blame	80	75	Often	27	25	Never
3	Rumination	86	80	Always	21	20	Never
4	Catastrophizing	90	84	Always	18	16	Never
5	Acceptance	88	82	Always	19	20	Never
6	Positive Refocusing	61	57	Often	46	43	Seldom
7	Refocus on Planning	79	74	Often	28	26	Seldom
8	Putting Into Perspective	58	54	Often	49	46	Seldom
9	Positive Reappraisal	71	67	Often	36	33	Seldom
Mean		79	74	Often	28	26	Seldom

Cognitive Emotion Regulation in English Online Learning Process at Second, Fourth and Sixth Semester

The table above is a summary table of the frequency of responses for the nine questionnaire items for each indicator. There are nine strategies to regulate emotions, namely Self Blame, Other Blame, Rumination, Catastrophizing, Acceptance, Positive Refocusing, Refocus on Planning, Putting Into Perspective, and Positive Reappraisal. For the first questionnaire point, namely how to regulate cognitive emotions by self-blame. There are nine items to regulate emotions by blaming themselves. The general content of this item is how students blame themselves for when English online learning process. Such as feeling guilty when unable to attend the experience, feeling unable to do lecture assignments, feeling guilty for not sending assignments, and feeling guilty for not taking online English exams, for the positive option in the always category. For negative response has never category.

The second point is other blame which generally includes how students regulate emotions by blaming other people or other things. There are five items at this point such as blaming the lecturer for changing the course schedule, blaming the lecturer for giving convoluted material, blaming the lecturer for not checking student assignments, blaming the lecturer for giving a lot of assignments and not tolerant of delays in sending assignments. For positive option in the often category, for negative option has never category.

Then for the third point, namely rumination. Five items generally contain about how students regulate emotions by continuously thinking about their feelings and thoughts towards online learning, such as thinking about the reasons for not being enthusiastic about learning English online, thinking about how they feel during the learning process, thinking about psychology during online learning, thinking about feelings. When doing assignments and thinking of ways to deal with anxiety during online English exams. The positive option in the Always category and the negative option in never category.

The fourth point is Catastrophizing which contains five items about how students regulate emotions by thinking the worst about online learning such as feeling that online learning is less efficient and effective, feeling difficult to adjust to online learning, feeling difficult when doing assignments, and feeling that he experienced worse than anyone else. For positive response in the always criteria. and for the negative option in never category.

The next point is Acceptance which also has five items about how students regulate by surrender and accept online learning such as feeling excited during the online learning process, feeling obligated to follow the online learning process, feeling that they have to adapt to online English learning, and learning to motivate themselves towards online learning. For positive option in always a category. For negative option has never category.

The sixth point is Positive Refocusing which contains thinking about fun things compared to thinking about learning English online such as thinking about things that are better and fun than online learning, thinking about something that makes learning online excited, thinking about fun experiences, and thinking about the positive impact of learning English online. For positive option in the often category and a negative option has a seldom category.

The seventh point is Refocus on Planning which contains about how to regulate emotions by thinking about the best solution in the process of learning English online, such as feeling that you have to learn as well as possible when learning English online, thinking about how to overcome difficulties when learning English online, such as think of a plan to deal with learning English online and think of the best way to adapt to the process of English online learning. For positive option in the often category and the negative option in the seldom category.

The eighth point is Putting Into Perspective which contains five items on how to regulate emotions when learning English online by reducing the focus on online learning such as feeling more comfortable when learning online, thinking that other people's experiences are worse, thinking that online learning is not too bad, Feel that there are many things worse than learning English online, and feel more excited when learning English online. For positive option in the often criteria and the negative option in seldom category.

The last point is Positive Reappraisal which contains five items on how to regulate emotions by finding the positive side of learning English online, such

as feeling more confident when discussing online, feeling more active in discussing online, feeling more often studying and doing assignments when learning online and feel the value becomes better when learning online. For positive option in the often category and a negative option in seldom category.

Based on the table above, it is proved that the final result of analyzing student responses to the nine indicators of the questionnaire with a total of positive answers is often criteria and negative responses are seldom criteria.

#### Dicussion

Based on the results of the study, the researcher found out that students' cognitive emotion regulation in English online learning at English Education Program of Muhammadiyah University of Bengkulu. The data were presented in more detail and comprehensive to reveal the connection of current findings with the previous theory (Garnefski, 2001). The study found that self-blame, rumination catastrophizing, and acceptance was common strategies used by students in online English learning, while other blame, positive refocusing, refocus on planning, putting into perspective and positive reappraisal was strategies that often used by students.

First, students' cognitive emotion regulation strategies in self-blame. This research indicates that students who show positive behavior feel guilty when making a mistake. Based on nine strategies, other blame was the sixth strategy that students often use, which is indicated by feeling guilty when don't make assignments during the English online learning process, and feel guilty when late in submitting assignments during the English online learning process. Behavioral self-blame involves the attribution of undesirable events to one's behaviors (Oftahedal M, et.al 2012).

Second, students' cognitive emotion regulation strategies in other blame. Students often use other blame as the way they regulate their emotions when English online learning. Based on nine strategies, other blame was the fifth strategy that students often use, which indicated by students feeling that the lecturer gives too many assignments and feel that the lecturer does not tolerate delays in sending assignments. This research contrast to the finding by Oftahedal M, et.al 2012 in his research other blame is the strongest indicator.

Third, students' cognitive emotion regulation strategies in rumination. Rumination is one strategy to regulate emotion by feeling and thinking about negative events. Based on nine strategies rumination was the fourth strategy that students use, which indicated by almost of students thinking about their anxiety when English online exam. The relationship between low emotional clarity and rumination moderated by intolerance of ambiguity, so that individuals bothered by ambiguity would be more motivated to ruminate in response to not knowing how they feel (Vine, 2014). Fourth, students' cognitive emotion regulation strategies in catastrophizing. Rumination was common strategy when students in the online learning process. This can be proven by students who feel that their situation was worse than other students when English online learning. This study contradicts to Cuevas López, M, et, al (2021) The least frequently used strategies for both groups were, Catastrophizing which was associated with negative effects and emotional interference.

Fifth, students' cognitive emotion regulation strategies in acceptance. Acceptance quite distinct from other frequently studied ways of regulating emotion (e.g., suppression, most forms of cognitive reappraisal, rumination) that a most often based on some form of active modification of emotional state in terms of quality, strength, length, or frequency of emotion (Gross, 2015). This strategy commonly used by students because they inevitably have to accept online English learning. This indicated by the large number of students who feel that they have an obligation to English online learning process.

Sixth, students' cognitive emotion regulation strategies in positive refocusing. Positive Refocusing consists of directing attention to pleasant thoughts that diminish the effect of the stressful situation. Positive Refocusing requires not focusing exclusively on the negative consequences of an event but seeking out its few negative aspects (Fernández Cruz, 2020). This strategy not very commonly used by students, this happens because students think less about fun things than difficulties when learning English online. This indicated by the lack of students thinking about the positive impact of English online learning.

Seventh, students' cognitive emotion regulation strategies in refocus on planning. This strategy also a strategy that not very commonly used by students, this can be seen from the lack of student participation in thinking about the best solutions to problems that occur, especially when students lack thinking about the best solution to deal with the situation of English online learning. Whereas a refocus on Planning allows us to focus our minds on problem-solving (Fernández Cruz, 2020).

Eight, students' cognitive emotion regulation strategies in putting into perspective. This strategy least used because it has the lowest score. This can be proven by the lack of students' thinking in reducing the focus on the difficulties they face, for example, students do not think that other people's experiences are worse when English online learning.

Ninth, students' cognitive emotion regulation strategies in positive reappraisal. This strategy also one of the strategies that not commonly used, this indicated by only a few students who feel that study harder when English online learning. This research contradicts to (Cuevas López 2021) The most commonly used strategies for both groups were "Acceptance", "Positive reappraisal", and "Putting into perspective"— strategies that not associated with negative effects.

With the results obtained, we can show that a higher degree of emotional regulation related to a lower experience of stress factors, in accordance with the research (Cabanach, R.G et.al 2018). Every student has their own way of confronting the social isolation resulting from the lockdown, as they must deal with uncertainty, anxiety, and worries caused by the situation (Gaeta, M.L et.al 2021). this can be caused by various factors, such as signals, media, and various students' unpreparedness in facing English online learning.

This results are similar to the ones obtained in the research carried out by *Pérez-López, E et.al* 2021 showing that a student's effort to adapt to a new learning model demands more commitment. This situation calls for more management of emotions, considering such variables as social isolation, internet access, the economic context, and the general uneasiness associated with the pandemic (Del Arco, I et.al 2021).

Based on this research, that is coincide with Fernández, A. et.al 2020. In thinking that academic adaptation not only a question of means, but also of teaching models that can the university must adapt itself to a new teaching model that allows for students' academic development. Regarding the students, the Psycho-pedagogical Department/Academic Orientation Unit must offer programs that help students to better adapt to the new model, preventing possible early dropouts caused by poor academic and social adaptation (Lizarte, E.J et.al 2020).

## Conclusion

The result of this research revealed that the students applied all of the nine cognitive emotion regulations. Self-Blame, Catastrophizing, Acceptance, and Rumination were the most commonly used out of the nine strategies. It was concluded that there were variations on the students' cognitive emotion regulation in English online learning process.

## D. REFERENCES

- Al-badareen, G. (2016). Cognitive Emotion Regulation Strategies as Predictors of Academic Achievement among University Students. Journal of Educational and Psychological Studies. Vol. 10 Issue 4, 2016.
- Aldao, A., Sheppes, G., Gross, J.J. (2015) Cognitive Therapy and Research. *Emotion Regulation Flexibility*. Volume 39, Number 3.
- Arikunto, S. (2006). Prosedure Penelitian Suatu Pendekatan Praktik Edisi Revisi VI. Jakarta. Rineka Cipta

Arsyad, Azhar. 2009. Media Pembelajaran. Jakarta: Rajawali Pers.

- Azevedo, R., Taub, M., Mudrick, N. V., Millar, G. C., Bradbury, A. E., & Price, M. J. (2017). Using Data Visualizations to Foster Emotion Regulation During Self-Regulated Learning with Advanced Learning Technologies. In J. Buder & F. W. Hesse (Eds.), Informational Environments: Effects of Use, Effective Designs (pp. 225–247). Springer International Publishing.
- Bakri, Hasrul. 2011. Desain Media Pembelajaran Animasi Berbasis Adobe Flash CS3 Pada Matakuliah Instalasi Listrik 2. *Jurnal MEDTEK*. Retrieved from https://dokumen.tips/documents/jurnalhasrulbakri.html.
- Banano,G.A., Mayne, T.J.(2001). Emotions Current Issues and Future Directions. New York: Guilford Press.
- Boekaerts, M. (2002). Motivation to Learn: Education Practices, Series 10. International Academy of Education. http://www.ibe.unesco.org
- Cabanach, R.G.; Fernández-Cervantes, R.; Souto-Gestal, A.; Suárez-Quintanilla, J.A. Regulación emocional y estrés en estudiantes universitarios de fisioterapia. Rev. Mex. Psicol. 2018, 35, 167–178.
- Carver, C.S., Scheiier, M.F., & Weintraub, J.K. (1989). Assessing coping stategies: A theoretically based approach. *Journal of Personality* and Social Psychology, 56, 267-283.
- D'Errico, F. (2018). Cognitive emotions in E-Learning Processes and Their Potential Relationship with Students' Academic Adjustment. International Journal of Emotion Education. 1, 89-111.
- D'Mello, S., Lehman, B., Pekrun, R., & Graesser, A. (2014). Confusion can be beneficial for learning. *Learning and Instruction*, 29, 153–170.
- Del Arco, I.; Silva, P.; Flores, O. University teaching in times of confinement: The light and shadows of compulsory online learning. Sustainability 2021, 13, 375. [CrossRef]
- Domaradzka, E., & Fajkowska, M. (2018). Cognitive Emotion Regulation Strategies in Anxiety and Depression Understood as Types of Personality. Frontiers in Paychology. 9:856.
- Engelmann, P., & Bannert, M. (2019). Fostering students' emotion regulation during learning: Design and effects of a computerbased video training. International Journal of Emotional Education. Volume 11, Number 2.
- Fernández, A.; Paricio, J.; Ibarra-Sáiz, M.S.; Rodríguez-Gómez, G. (2020)
  No es cuestión de medios, sino de modelo. Escenarios de reducción de la presencialidad. In REDU 2020 Red Estatal de Docencia Universitaria; REDU: Zaragoza, Spain.
- Fernández Cruz, M. (2020). Evaluation of the Emotional and Cognitive Regulation of young people in a lockdown situation due to the Covid-19 pandemic. *Frontiers in Psychology*. ISSN: 1664-1078.
- Fried, L. (2011). Teaching Teachers about Emotion Regulation in the Classroom. Australian Journal of Teacher Education. 36(3).

- Gaeta, M.L.; Gaeta, L.; Rodriguez, M.S. The impact of COVID-19 home confinement on mexican university students: Emotions, coping strategies, and self-regulated learning. Front. Psychol. 2021, 1–12.
- Garnefski, N., & Kraaij, V., & Spinhoven, P. (2001). Negative Life Events Cognitive Emotion Regulation and Emotional Problem. *Personality and Individual Diferrences*. 30, 1311-1327.
- Garnefski, N., & Kraaij, V. (2007). The Cognitive Emotion Regulation Questionnaire Psychometric Features and Prospective Relationships with Depression and Anxiety in Adults. European Journal of Psychological Assessment. Vol. 23(3):141–149.
- Garnefski, N., van den Kommer, T., Kraaij, V., Teerds, J., Legerstee, J., &Onstein, E. (2002). The relationship between cognitive emotion regulation strategies and emotional problems. *European Journal* of Personality, 16, 403–420.
- Garnefski, N., & Kraaij, V. (2006). Relationship between cognitive emotion regulation strategies and depressive symptoms: A comparative study of five spesific samples. *Personality and Individual Differences*, 40, 1659-1669.
- Gross, J.J. (1999). Emotion regulation: Past, present, future. Cognition and Emotion, 13, 551–573.
- Gross, J. J. (1998). The emerging field of emotion regulation: An integrative review. Review of General Psychology. Cognition and Emotion 2(3), 271–299.
- Gross, J. J. (2015). The extended process model of emotion regulation: elaborations, applications, and future directions. Psychol. Inq. 26, 130–137. doi: 10.1080/1047840X.2015.989751
- Herzberg, Paul. A, .(1983). Principle Of Statistics. USA: Jhon Willey and Sons, Inc.
- Hrastinski, S.(2008). Asynchronous and Synchronous E-Learning; A study of asynchronous and synchronous e-learning methods discovered that each supports different purposes. *EDUCAUSE Quarterly*. vol. 31, no. 4.
- Jermann, F., Van der Linden, M., d'Acremont, M., & Zermatten, A. (2006). Cognitive Emotion Regulation Questionnaire (CERQ): Confirmatory factor analysis and psychometric properties of the French translation, European Journal of Psychological Assessment, 22, 126–131.
- Ilie, V., & Sarah, F. (2019). Traditional Learning Versus E-Learning. The European Proceedings of Social & Behavioural Sciences. 2357-1330.
- Kelmendi, L. (2019). TRADITIONAL LEARNING VERSUS E-LEARNING. South East European University; University of Gjakova.
- Kobayashi, M. (2017). Students' Media Preferences In Online Learning. Turkish Online Journal of Distance Education. Volume: 18 Number: 3 Article 1.
- Lizarte, E.J. Early dropout in college students: The influence of social integration, academic effectiveness and financial stress. In En

Experiencias e Investigaciones en Contextos Educativos; Lucena, F.J.H., Ramos, F.J.S., Núñez, J.A.L., Rodríguez, J.M.R., Eds.; Dykinson: Madrid, Spain, 2020; pp. 519–531.

- Lim, F,P. (2017). An Analysis of Synchronous and Asynchronous Communication Tools in e-Learning. Advanced Science and Technology Letters .Vol.143 (AST 2017), pp.230-234.http://dx.doi.org/10.14257/astl.2017.143.46
- Cuevas López, M.; Ávalos Ruiz, I.; Lizarte Simón, E.J. Emotional Cognitive Regulation in University Students during Lockdown: A Comparative Analysis of Students from Spanish Universities. Sustainability **2021**, 13, 6946. https://doi.org/10.3390/su13126946
- Mason, J. (2002). Qualitative Researching . SAGE Publications. London.
- Maxwell, J.(1996). Qualitative Research Design an Interactive Approach. USA: SAGE publication Inc.
- Morris, A.S., Silk, J.S., Steinberg, L., Myers, S.S. & Robinson, L.R. (2007). The role of the family context in the development of emotion regulation. *Journal of Social Development*. Vol. 16 (2), p. 361-388. DOI: 10.1111/j.1467-9507.2007.00389.x
- Mursal, M.N.F. (2019) THE USE OF PICTURE SERIES AS MEDIA IN INCREASING STUDENTS' WRITING SKILL AT THE FIRST GRADE STUDENTS OF SMA NEGERI 1 GOWA (An Experimental Research at the first grade Students of SMA Negeri 1 Gowa). MAKASSAR MUHAMMADIYAH UNIVERSITY. retieved from https://digilibadmin.unismuh.ac.id/upload/9197-Full\_Text.pdf.
- Nett, U. E., Goetz, T., & Hall, N. C. (2011). Coping with boredom in school: An experience sampling perspective. Contemporary Educational Psychology, 36(1), 49–59.
- Nguyen, T. (2015). The Effectiveness of Online Learning: Beyond No Significant Difference and Future Horizons. *MERLOT Journal of Online Learning and Teaching*. Vol. 11, No. 2.
- Oftadehal, m., Mahmoodi-kahriz, B., Torabi Nami, M. (2012). Cognitive Emotion Regulation, Depression and Stess in Iranian Students'. Neuroscience Research Letters., pp.-44-47.
- Pérez-López, E.; Atochero, A.V.; Rivero, S.C. Educación a distancia en tiempos de COVID-19: Análisis desde la perspectiva de los estudiantes universitarios. RIED Rev. Iberoam. Educ. Distancia. 2021, 24, 331–350. [CrossRef]
- Perveen, A. (2016). Synchronous and Asynchronous E-Language Learning: A Case Study of Virtual University of Pakistan. Open praxis; International Council for Open and Distance Education. vol. 8 issue 1, January–March 2016, pp. 21–39 (ISSN 2304-070X).
- Reivich, K. &. Shatté (2002). The resilience factor: 7 essential skills for overcoming life's inevitable obtacles. New York: Broadway Book
- Sapsford, Roger & Victor Jupp. (2006) . Data Collection and Analysis.

London: SAGE publications Ltd.

- Siska Saputra. (2017). Hubungan Regulasi Emosi dengan Hasil Belajar Siswa. Dinas Pendidikan Provinsi Sumatera Barat. Volume 6 Number 3 2017, pp. 96-100.
- Sugiyono. 2009. Metode Penelitian Kuantitatif Kualitatif dan R&D. Bandung: Alfabeta.
- Vine, V. Aldao, A. & Nolen-Hoeksema, S. (2014) Chasing Clarity: Rumination as a Strategy for Making Sense of Emotions. Journal of Experimental Psychopathology. JEP Volume 5 (2014), Issue 3, 229-243.
- Wilson, C.J, Barners-Holmes. (2014). The effect of emotion regulation strategies on physiological and self-report measures of anxiety during a stress-inducing academic task. International Journal of Psychology and Psychological Therapy. 14(1):1-15.