

Psychological Research & Intervention

Online Learning: The Role of Academic Self-Efficacy In Creating Academic Flow
Eka A pristian Pantu

Effect of Covid-19 related Stress on Marital Quality during Covid-19 Pandemic
Ni Nyoman Budiartini

Application of Internet-based Cognitive Behavior Therapy Approaches for Female Adolescent
with Major Depressive Disorder
Khadijah Auliaur Rohmaani & Cut Nurul Kemala

Brand Authenticity as a Mediator of Relationship Between Self-Congruity and Consumer
Loyalty
Susilo Hidayat & Farida Agus Setiawati

Career Adaptability and Work Engagement of Millennial Startup Employees
Novia Haryani





Psychological Research and Intervention
ISSN 2614-7041 (online)
ISSN 2614-0403 (printed)

Publisher

Department of Psychology, Universitas Negeri Yogyakarta

Editor-in-chief	: Farida Agus Setiawati
Managing Editor	: Banyu Wicaksono
Editorial Board	: Gavin Sullivan
	Ruut Veenhoven
	Mariani Binti Md Nor
	Yulia Ayriza
	Rita Eka Izzaty
	Adi Cilik Pierewan
	Tria Widyastuti
	Prima Vitasari

Setting

Muhammad Dzakir Amaniey

Published biannually, in June and December

Psychological Research and Intervention is a biannual peer-reviewed scientific journal published by the Department of Psychology of Universitas Negeri Yogyakarta, which focuses on theoretical and applied researches in psychology.

THE EDITORS ARE NOT RESPONSIBLE FOR THE CONTENT OF AND
THE EFFECTS THAT MIGHT BE CAUSED BY THE MANUSCRIPTS.

RESPONSIBILITY IS UNDER THE AUTHORS'

Editorial

Department of Psychology, Universitas Negeri Yogyakarta
Jl. Colombo No. 1, Karangmalang, Depok, Sleman, Yogyakarta 55281
Telephone: 0274 586168 ext. 1411, Facsimile: 0274 520326
Website: <https://journal.uny.ac.id/index.php/pri> | E-mail: journal_psikologi@uny.ac.id

Copyright © 2021, Psychological Research and Intervention

Foreword

We are very pleased that Psychological Research and Intervention is releasing its fourth volume in 2021. We are also very excited that the journal has been attracting papers from various regions in Indonesia.

Psychological Research and Intervention contains and spreads out the results of research and intervention in the science of psychology, and is aimed at facilitating discussion and discourse between scholars of psychology as well as further advancing the science of psychology. The editorial board expects comments and suggestions for the betterment of the future editions of the journal. Special gratitude goes to the reviewers for their hard work, contributors for their trust, patience, and timely revisions, and all of the journal team for their assistance in publishing this journal. Psychological Research and Intervention is continuing to grow and spread its wings to reach its aim in becoming a global initiative

Yogyakarta, June 2021

Editor-in-Chief

TABLE OF CONTENT

<i>Eka Apristian Pantu</i>	Online Learning: The Role of Academic Self-Efficacy In Creating Academic Flow	1 – 8
<i>Ni Nyoman Budiartini</i>	Effect of Covid-19 related Stress on Marital Quality during Covid-19 Pandemic	9 – 18
<i>Khadijah Anliaur Robmaani & Cut Nurul Kemala</i>	Application of Internet-based Cognitive Behavior Therapy Approaches for Female Adolescent with Major Depressive Disorder	19 – 34
<i>Susilo Hidayat & Farida Agus Setiawati</i>	Brand Authenticity as a Mediator of Relationship Between Self-Congruity and Consumer Loyalty	35 – 42
<i>Novia Haryani</i>	Career Adaptability and Work Engagement of Millennial Startup Employees	43 – 49



Online Learning: The Role of Academic Self-Efficiency in Creating Academic Flow

Eka Apristian Pantu¹

¹ Fakultas Ilmu Tarbiyah dan Keguruan, Institut Agama Islam Negeri

Sultan Amai Gorontalo

¹ ekapantu@iaingorontalo.ac.id

Abstract

The spread of Covid-19 encourages educational institutions to maximize online learning. Online learning can work well if students can focus on learning. The ability to focus on learning is known as academic flow. This study aims to explain the effect of academic self-efficacy on flow academic in online learning. This research involves 296 participants who were selected by incidental sampling. The instruments used in this research are the self-efficacy scale and flow short scale, which was analyzed using linear regression techniques. The results show that academic self-efficacy significantly affects academic flow ($\beta=0,609$; $p=<0,001$). The result means that an increase in academic self-efficacy will also increase academic flow.

Keywords: *academic self-efficacy; academic flow, online learning*

Introduction

The spread of Covid-19 in all parts of the world has changed our way of life. The need to stay healthy requires individuals to keep a distance when leaving the house and always wear a mask. In addition, some countries choose to implement a lockdown. The massive spread of Covid-19 also impacts the world of education (Aji, 2020).

In the world of education, Covid-19 has resulted in the closure of educational facilities, both school and college institutions. The closure of this facility was followed by a policy to implement online learning. Rapid system changes without prior preparation have resulted in the unpreparedness of educational institutions to carry out online learning. As a result, online learning that is carried out only moves face-to-face learning to a virtual space.

Online learning that is applied also presents its problems. Network instability and difficulty concentrating are problems that individuals complain about in online learning (Handayani, 2020). Network instability occurs due to uneven

development in Indonesia. Meanwhile, the concentration problem can be solved if the individual succeeds in achieving the academic flow condition. In addition, flow is also reported to have a positive effect on the cumulative achievement index (Adil, Ameer, & Ghayas, 2019).

Flow is a condition in which individuals perform their duties smoothly in doing these tasks. Individuals are also fully dedicated to the task to ignore hunger, fatigue, and feelings of discomfort (Nakamura and Csikszentmihalyi, 2002). Therefore, an educator should be able to design appropriate learning methods for individuals to improve academic flow (Ijubin-Golub, Rijavec, & Olcar, 2020; Zhang, Lou, Zhang, & Zhang, 2019). Among the methods that educators can provide to improve academic flow are by providing feedback (Ellwood & Abrams, 2018; Yu, Wu, & Huang, 2018) and the Montessori method for orienting and motivating adults (MOMA) (Aini, Ilfiandra, & Saripah, 2019)

When individuals succeed in achieving academic flow conditions, the learning concentration disorders experienced by individuals in online learning can be resolved. This is reinforced by research conducted by Santosa (2015), who found that academic flow can occur in online learning. Individuals with a good academic flow are reported to have good learning achievement (Putri, 2016), low anxiety (Mao, Yang, Bonaiuto, Ma, and Harmat, 2020), and reduce individual procrastination (Hidayati and Aulia, 2019; Pradana & Putri, 2019).

Flow is easier to achieve when individuals carry out organizational activities when compared to academic activities (Rosiana et al., 2015). Individuals can still feel academic flow even though individuals are busy organizing and working (Mayangsari & Pratiwi, 2019). Based on these findings, efforts should be found that can improve academic flow, especially in online learning

Flow can occur due to internal and external factors. External factors that can cause academic flow include interactive learning (Ha and Im, 2020), crowd levels (Liu and Csikszentmihalyi, 2020), and social support (Amira & Muhid, 2020). In addition, the role of parents can also affect the occurrence of academic flow (Kemala, Safitri, and Zwagery, 2018).

In addition to external factors, academic flow can also be influenced by internal factors such as self-efficacy (Diola & Mudjiran, 2019; Purwati & Akmaliyah, 2016), self-esteem (Djau & Cahyono, 2017), religiosity (Alfarabi, Saraswati, and Dayakisni, 2017), academic stress (Gatari, 2020), optimism (Suryaningsih, 2016) perfectionism (Ijubin-Golub, Rijavec, and Jurjec, 2018), and achievement motivation (Arif, 2013).

Academic flow can occur with academic self-efficacy. Academic self-efficacy is the belief that an individual has that he can complete the tasks that are his academic demands well. Individuals who

have good self-efficacy are reported to have good academic achievements (Villafane, Xu, and Raker, 2016). In addition, individuals who have good self-efficacy can make adjustments in lectures (Mutar, Mohammad, and Hmmud, 2020; Wijaya & Pratitis, 2012). Low self-efficacy also impacts the individual's low academic persistence (Cassidy, 2015) and problems in internet use (Odaci, 2011).

A study conducted by Diola and Mudjiran (2019) conducted on Bidikmisi FIP UNP students found that their self-efficacy contributed to academic flow. This result is reinforced by another study conducted by Mesurado, Richaud, and Mateo (2016), which found that self-efficacy affected academic flow. These studies that use face-to-face learning methods make researchers interested in examining how academic self-efficacy influences academic flow in online learning. Research is becoming increasingly attractive because academic self-efficacy in face-to-face learning is higher than in online learning (Dayne, Harabayashi, Seli, & Reidobolt, 2016).

Based on the description above, the purpose of this study is to examine how the influence of academic self-efficacy on academic flow in online learning. Meanwhile, the benefits that can be obtained from this research are enriching knowledge about academic flow in online learning so that educators can determine the suitable method for conducting online learning.

The sudden changes due to the Covid-19 pandemic resulted in individuals not being ready to switch from face-to-face learning to online learning. However, as time goes by, individuals are getting used to and become competent in online learning to impact academic self-efficacy, which also increases (Lee, 2016; Septiana, 2020). When individual academic self-efficacy is high, individuals have high learning goals and expectations to become serious in learning and create conditions for academic flow

(Elias, Mustafa, Roslan, and Noah, 2010). Based on the description above, the hypothesis proposed in this study is that self-efficacy is a predictor of academic flow in online learning.

Methods

Participants

The participants in this study were active Indonesian students who took part in online learning. In 2019, the ministry recorded 7,339,164 active students throughout Indonesia (Ministry of Research, Technology and Higher Education, 2018). Meanwhile, in this study, the subject of the research sample amounted to 296 students where the selection of subjects used the incidental sampling method. For a population above 1,000,000 and with an error rate of 10%, the number of samples is 272, which is the minimum number of samples needed (Sugiyono, 2013).

Research design

The design used in this research is correlational quantitative. This design was chosen to find a causal relationship between academic self-efficacy variables and academic flow.

Instruments

The independent variable in this study is academic self-efficacy. This variable was measured using the motivated strategies for learning questionnaire (MSLQ) scale from Pintrich and Groot (1990), where the items used were only those on the aspect of self-efficacy. The original scale of Pintrich and Groot totalled nine items. Then tested the validity using factor analysis so that the number of items remaining and used in this study amounted to eight items using the Likert model. The reliability of this scale is 0.905. An example of an item from this scale is “I expect to better score on the online learning system than other friends”.

Meanwhile, the dependent variable in this study is academic flow. The flow short-scale measured this variable from Rheinberg, Vollmeyer, and Engeser and the addition of items from Abuhamdeh (Engeser, 2012). The total items on this scale are thirteen items, then after being adapted into Indonesian and testing the validity using factor analysis, the remaining seven items with the reliability of 0.854. This scale is a Likert scale with five answer choices. An example of an item from this scale is “I am very concentrated when learning online”.

Analysis

The analysis was carried out using the linear regression method with the help of JASP software (JASP Team, 2020).

Findings

The academic self-efficacy variable has a score between nine and forty with an average of 26,176 and a standard deviation of 6.448. Based on the average, the category of individual academic self-efficacy scores is in the medium category. Meanwhile, the academic flow variable ranges from seven to 34, where the average is 19.716, and the standard deviation is 5.911. Individual academic flow scores, on average, are in the medium category.

Table 1.
Descriptive Statistics

Variable	Mean	SD	Category
Academic Self-Efficacy	26,176	6,448	Medium
Academic Flow	19,716	5,911	Medium

Based on the results of regression analysis (Table 2), it was found that academic self-efficacy had a significant effect on the academic flow in online learning ($F= 231,669$, $p= <0.01$). This finding means that academic self-efficacy is

a predictor of academic flow. Every 1 SD increase in academic self-efficacy will lead to an increase in the academic flow by 0.664. The academic self-efficacy variable can predict academic flow in online learning by 44.1%, where the other 55.9% is influenced by other variables not examined in this study.

Table 2.
Regression Result

Predictor	R ²	F	p	β
Academic Self-Efficacy	0,441	231,699	< ,01	0,664

Discussion

This study indicates that there is a significant and positive effect of academic self-efficacy on academic flow. This shows that the academic self-efficacy that exists in individuals can be a predictor of their academic flow. These results are consistent with previous research conducted by Joo, Oh, and Kim (2015), who found that academic self-efficacy also affects academic flow in online learning situations.

This can happen because, in online learning, individuals are required to manage their learning independently. This is inseparable from the lack of control that teachers can give to individuals when learning takes place. If individuals can regulate themselves well, individuals will avoid internet abuse and show good self-efficacy (Hu et al., 2019; Lee, Watson, & Watson, 2020; Odaci, 2011). The higher the academic self-efficacy in the individual, the higher the academic flow in online learning experienced by the individual (Diola & Mudjiran, 2019).

Another thing that causes academic self-efficacy to affect academic flow in online learning is that individuals are required to be actively involved in learning in online learning. When teachers make online learning more active, individuals will

be interested in learning (Ha & Im, 2020). Individuals with a high interest in learning will be much involved in the classroom to interact with classmates. The more intense the interactions in online learning, the higher the academic self-efficacy shown (Martha, 2015; Shen, Cho, Tsai, and Marra, 2013). Individuals who show high self-efficacy become more resilient in learning which is indicated by their high resilience (Anggraini, Wahyuni, & Soejanto, 2017). The higher the resilience possessed, the more it can bring up the academic flow in the individual (Primasari, Mayangsari, & Zwagery, 2019).

In addition to the two factors above, the experience factor in participating in online learning is also the cause of the influence of academic self-efficacy on academic flow. At the beginning of the Covid-19 pandemic, individuals experienced unpreparedness and not a few individuals were taking online learning for the first time, and this had an impact on individual academic self-efficacy in online learning, which was lower when compared to individual academic self-efficacy in face-to-face learning methods (Dayne, Harabayashi, Seli, and Reidobolt, 2016). As time goes by, individuals are getting used to following online learning. The experience of participating in online learning increasingly increases individual academic self-efficacy (Lee, 2016; Santoso, 2014). High academic self-efficacy has an impact on individual achievement motivation (Amir, 2016). Individuals with high achievement motivation result in high academic flow in the individual (Arif, 2013). In this study, there were 55.9% unexplained variables. One of the other variables not tested in this study is the personality factor. Adaptive perfectionist personality is related to academic flow, while maladaptive perfectionists show the opposite relationship (Ijubin-Golub, Rijavec, & Jurjec, 2018). In addition to personality, the variable also not explained in this study is cyberloafing, which has a negative

relationship with the academic flow (Yuwanto, 2018).

This research is also not free from existing limitations. The non-implementation of screening on how long individuals have been doing online learning or how familiar individuals are with the learning applications used are limitations in this study. For further researchers who want to continue research, they can use personality variables in further research. In addition, addiction to the use of the internet and online games can also be considered a predictor of academic flow in online learning.

Conclusion

Based on the results of the study, several conclusions can be drawn as follows:

1. Academic self-efficacy is a predictor of academic flow in online learning.
2. An attractive learning method is one of the keys to success in online learning.
3. Skills in carrying out online learning can support the success of online learning

The implications and suggestions based on the research that has been done are:

1. Learners are expected to be able to adapt to online learning methods in order to achieve high academic self-efficacy conditions.
2. Educators prepare the most appropriate teaching methods in online situations and prioritize interactive learning models. This is because, in interactive learning, there is an intense two-way interaction between educators and learners. Educators can provide social support or motivate learners in the learning process to increase their academic self-efficacy.
3. Educational institutions can provide training for educators and students in online-based learning applications to realize the performance experience and vicarious experience for students.

References

- Adil, A., Ameer, S., & Ghayas, S. (2019). Impact of Academic Psychological Capital on Academic Achievement among University Undergraduates: rules of flow and self-handicapping behavior. *PsyCh Journal*, 9(1), 56-66.
- Aini, N. Q., Ilfiandra, & Saripah, I. (2019). Aspek-Aspek Flow Akademik. *Journal of Innovative Counseling: Theory, practice, & research*, 3(2), 43-51.
- Aji, R. H. (2020). Dampak Covid-19 pada Pendidikan di Indonesia: Sekolah, Keterampilan, dan Proses Pembelajaran. *Salam: Jurnal Sosial dan Budaya Syar-i*, 7(5), 395-402.
- Alfarabi, A., Saraswati, P., & Dayakisni, T. (2017). Religiusitas dengan Flow Akademik pada Siswa. *Psikis*, 3(2), 145-154.
- Amir, H. (2016). Korelasi Pengaruh Efikasi Diri dan Manajemen Diri terhadap Motivasi Berprestasi pada Mahasiswa Pendidikan Kimia Universitas Bengkulu. *Mapen*, 10(4), 336-342.
- Amira, R. D., & Muhid, A. (2020). Self-Regulated Learning, Self-Esteem, Dukungan Sosial, dan Flow Akademik. *Indonesian Psychological Research*, 2(2), 65-74.
- Anggraini, O. D., Wahyuni, E. N., & Soejanto, L. T. (2017). Hubungan antara Efikasi Diri dengan Resiliensi Menghadapi Ujian pada Siswa Kelas XII SMAN 1 Trawas. *Jurnal Konseling Indonesia*, 2(2), 50-56.
- Arif, K. (2013). Hubungan antara Motivasi Berprestasi dan Flow Akademik. *Calyptra*, 2(1), 1-12.
- Cassidy, S. (2015). Resilience Building in Students: the role of academic self-efficacy. *Frontiers in Psychology*, 6, 1-14.

- Dayne, N., Hirabayashi, K., Seli, H., & Reidobolt, W. (2016). the Examination of Academic Self-Efficacy and Academic Help Seeking of Higher Education Students Taking an on Campus or Online General Education Course in Family and Consumer Sciences. *Journal of Family and Consumer Sciences Education*, 33(2), 13-24.
- Diola, S., & Mudjiran. (2019). Kontribusi Self-Efficacy terhadap Flow Akademik pada Mahasiswa Bidikmisi FIP UNP. *Jurnal Riset Psikologi*, 2019(3), 1-11.
- Djau, N. R., & Cahyono, R. (2017). Hubungan antara Self-Esteem dengan Flow Akademik pada Siswa Cerdas Istimewa. *Jurnal Psikologi Pendidikan dan Perkembangan*, 6(1), 65-71.
- Elias, H., Mustafa, S. M., Roslan, S., & Noah, S. M. (2010). Examining Potential Relationships Between Flow and Motivational Forces in Malaysian Secondary School Students. *Procedia Social and Behavioral Sciences*, 9, 2042-2046.
- Ellwood, R., & Abrams, E. (2018). Student's Social Interaction in Inquiry-Based Science Education: How experiences of flow can increase motivation and achievement. *Cultural Studies of Science Education*, 13(3), 395-427.
- Engeser, S. (2012). *Advances in Flow Research*. New York: Springer.
- Gatari, A. (2020). Hubungan Stres Akademik dengan Flow Akademik pada Mahasiswa. *Cognicia*, 8(1), 78-89.
- Ha, Y., & Im, H. (2020). the Role of an Interactive Visual Learning Tool and its Personalizability in Online Learning: Flow experience. *Online Learning Journal*, 24(1), 205-226.
- Handayani, L. (2020). Keuntungan, Kendala dan Solusi Pembelajaran Online Selama Pandemi Covid-19 : Studi Ekploratif di SMPN 3 Bae Kudus. *Journal Industrial Engineering & Management Research*, 1(2), 15-23.
- Hidayati, N., & Aulia, L. a.-A. (2019). Flow Akademik dan Prokrastinasi Akademik. *Jurnal Psikologi*, 6(2), 128-144.
- Hu, E., Stavropoulos, V., Anderson, A., Clarke, M., Beard, C., Papapetrou, S., et al. (2019). Assesing Online Flow Across Cultures: a two-fold measurement invariance study. *Frontiers Psychology*, 10, 1-16.
- Ijubin-Golub, T., Rijavec, M., & Jurjec, L. (2018). Flow in the Academic Domain: the role of perfectionism and engagement. *Asia-Pacific Education Research*, 27(2), 99-107.
- Ijubin-Golub, T., Rijavec, M., & Olcar, D. (2020). Student Flow and Burnout: the role of teacher autonomy support and student autonomous motivation. *Psychological Studies*, 65, 145-156.
- JASP Team (2020). *JASP* (Version 0.14.1) [Computer software].
- Joo, Y. J., Oh, E., & Kim, S. M. (2015). Motivation, Instructional Design, Flow, and Academic Achievement at a Korean Online University: A structural. *Journal of Computing in Higher Education*, 27, 28-46.
- Kemala, E., Safitri, J., & Zwagery, R. V. (2018). Hubungan antara Persepsi Keterlibatan Ayah dalam Pengasuhan dengan Flow Akademik pada Peserta Didik Kelas IX SMP Negeri 1 Banjarbaru. *Kognisia*, 1(2), 60-64.
- Kementerian Riset, T. d. (2018, Desember). *Statistik Pendidikan Tinggi 2019*. Retrieved Juli 12, 2021, from Pangkalan Data Pendidikan Tinggi (PPDIKTI) Kementerian Pendidikan, Kebudayaan, Riset, dan Teknologi: <https://pddikti.kemdikbud.go.id/asset/da>

- [ta/publikasi/Statistik%20Pendidikan%20Tinggi%20Indonesia%202019.pdf](#)
- Lee, C.-Y. (2016). Changes in Self-Efficacy and Task Value in Online Learning. *Distance Education*, 36, 59-79.
- Lee, D., Watson, S. L., & Watson, W. R. (2020). the Relationships Between Self Efficacy, Task Value, and Self Regulated Learning Strategies in Massive Open Online Courses. *International Review of Research in Open and Distributed Learning*, 21(1), 24-39.
- Liu, T., & Csikszentmihalyi, M. (2020). Flow among Introverts and Extraverts in Solitary and Social Activities. *Personality and Individual Differences*, 167, 1-8.
- Mao, Y., Yang, R., Bonaiuto, M., Ma, J., & Harmat, L. (2020). Can Flow Alleviate Anxiety? the roles of academic self-efficacy and self-esteem in building psychological sustainability and resilience. *Sustainability*, 20, 1-17.
- Martha, J. A. (2015). Peningkatan Hasil Belajar, Aktivitas, dan Efikasi Diri melalui Pembelajaran Model Carousel Feedback dan Showdown pada Mata Pelajaran Kewirausahaan. *Jurnal Konseling Indonesia*, 1(1), 68-75.
- Mayangsari, M. D., & Pratiwi, S. D. (2019). Flow Akademik pada Mahasiswa yang Aktif Berorganisasi dan Bekerja. *Psycho Holistic*, 1(2), 47-52.
- Mesurado, B., Richaud, M. C., & Mateo, N. J. (2016). Engagement, Flow, Self-Efficacy, and Eustress of University Students: a cross-national comparison between the Philippines and Argentina. *the Journal of Psychology*, 150(3), 281-299.
- Mutar, Q. M., Mohammad, H. M., & Himmud, S. H. (2020). Academic Achievement and Its Relation with Self-Efficacy and Academic Adjustment in EFL Class. *International Journal of Multicultural and Multireligious Understanding*, 7(5), 1-13.
- Nakamura, J., & Csikszentmihalyi, M. (2002). The Concept of Flow. In C. R. Snyder, & S. J. Lopez, *Handbook of Positive Psychology* (pp. 89-105). Oxford: Oxford University Press.
- Odaci, H. (2011). Academic Self-Efficacy and Academic Procrastination as Predictors of Problematic Internet Use in University Students. *Computers and Education*, 57, 1109-1113.
- Pintrich, P. R., & Groot, E. V. (1990). Motivational and Self-Regulated Learning Components of Classroom Academic Performance. *Journal of Educational Psychology*, 82(1), 33-40.
- Pradana, A. S., & Putri, D. E. (2019). Flow experience dan Prokrastinasi Akademik pada Mahasiswa. *Jurnal Psikologi*, 12(1), 44-56.
- Primasari, L. E., Mayangsari, M. D., & Zwagery, R. V. (2019). Hubungan Resiliensi dengan Flow Akademik pada Siswa di Daerah Lahan Gambut. *Kognisia*, 2(1), 99-104.
- Purwati, E., & Akmaliah, M. (2016). Hubungan antara Self-Efficacy dengan Flow Akademik pada Siswa Akselerasi SMPN 1 Sidoarjo. *Sympathic*, 3(2), 249-260.
- Putri, E. M. (2016). Hubungan antara Dukungan Sosial dan Flow Akademik dengan Prestasi Belajar Matematika Siswa SMA. *Calytra*, 5(1), 1-21.
- Rosiana, D., Sumaryanti, I. U., Diantina, F. P., Dwi, A., Fajrina, Dwiyanti, E. P., et al. (2015). Pengalaman Flow: mengantarai kesuksesan akademik dan organisasi. *SNaPP2015 Sosial, Ekonomi, dan Humaniora* (pp. 148-152). Bandung: Universitas Islam Bandung.
- Santosa, P. I. (2015). Student Engagement with Online Tutorial: a perspective on

- flow theory. *International Journal of Emerging Technologies in Learning*, 10(1), 60-67.
- Santoso, M. (2014). Self-Efficacy dan Flow Akademik ditinjau dari Temporal Motivation Theory pada Mahasiswa Fakultas Psikologi. *Calyptra*, 3(1), 1-12.
- Septiana, Y. (2020). Survei Efikasi Diri Mahasiswa Prodi Pendidikan Akuntansi pada Masa Pembelajaran Jarak Jauh. *Jurnal Ekonomi dan Pendidikan*, 17(2), 83-97.
- Shen, D., Cho, M.-H., Tsai, C.-L., & Marra, R. (2013). Unpacking Online Learning Experiences: Online learning self-efficacy and learning satisfaction. *Internet and Higher Education*, 19, 10-17.
- Sugiyono. (2013). *Metode Penelitian Kuantitatif, Kualitatif, dan Kombinasi (Mixed Methods)*. Bandung: Alfabeta.
- Suryaningsih, A. (2016). Hubungan Antara Optimisme dan Self-Efficacy dengan Flow Akademik Siswa SMA. *Calyptra*, 5(1), 1-22.
- Villafane, S. M., Xu, X., & Raker, J. R. (2016). Self-Efficacy and Academic Performance in First-semester Organic Chemistry: testing a model of reciprocal causation. *Chemistry Education Research and Practice*, 17, 973-984.
- Wijaya, I. P., & Pratitis, N. T. (2012). Efikasi Diri Akademik, Dukungan Sosial Orang Tua dan Penyesuaian Diri Mahasiswa dalam Perkuliahan. *Persona*, 1(1), 40-52.
- Yu, F.-Y., Wu, W.-S., & Huang, H.-C. (2018). Promoting Middle School Students' Learning Motivation and Academic Emotions via Student-Created Feedback for Online Student-Created Multiple-Choice Questions. *Asia Pacific Education Research*, 27(5), 395-408.
- Yuwanto, L. (2018). Academic Flow and Cyberloafing. *Psychology Research*, 8(4), 173-177.
- Zhang, J., Lou, X., Zhang, H., & Zhang, J. (2019). Modelling Collective Attention in Online and Flexible Learning Environments. *Distance Education*, 40(2), 278-301.



Effect of Covid-19 related Stress on Marital Quality during Covid-19 Pandemic

Ni Nyoman Budiartini

Department of Psychology, Universitas Negeri Yogyakarta;
Jl. Colombo No.1 Sleman Daerah Istimewa Yogyakarta, 55281
itsdiartini@gmail.com

Abstract

This research aimed to understand the effect of stress during the pandemic on marital quality in Bali. This research used a quantitative approach. Subjects involved in this research were 242 people who had been married for at least five years, with intact family conditions, and lived in Denpasar City, Bali. The instruments in this research were the COVID Stress Scale from Taylor (2020) and the Marital Quality scale arranged by Nurhayati (2017). The validity of this research used content validity by expert judgment. Reliability in the scale of this research used the Cronbach Alpha reliability coefficient. The COVID stress variable has a reliability of 0.934, while the variable of marital quality has a reliability of 0.889. As for the data analysis, descriptive analysis and simple linear regression analysis were used. Based on the data analysis, the regression coefficient was 0.028 and sig. 0.307, with the value of R square = 0.004. The results showed that COVID stress does not affect the marital quality in Bali.

Keywords: *marital quality, stress, COVID-19 pandemic*

Introduction

According to Indonesian statute no. 1 1974, marriage is a bond between a man and a woman as husband and wife to form a happy and eternal family (household) based on the One God. Getting married and then building a happy and whole family and having healthy children is the dream of many people.

Marriage means uniting two individuals with different characters, both of whom must accept all the good and bad sides. They also have to be ready to go through the hardships and joys of life together until the end of life (Oktarina, Wijaya, & Demartoto, 2015). Domestic life does not always run smoothly because sometimes there are conflicts that must be faced. Conflicts within the couple's relationship or conflicts from outside the

partner, such as (workplace or family environment) if not appropriately resolved, can cause stress. High levels of stress in a marital relationship and the absence of problem-solving sources of stress can affect an individual's evaluation of the marriage itself.

The quality of marriage is a subjective evaluation of the relationship between husband and wife, high quality of marriage is related to smooth communication, good adjustment of the couple, a high level of happiness and a high level of marital satisfaction with the husband and wife household relationship (Herlanda, 2017). The quality of marriage is essential. The poor quality of a marriage not only gives unhappiness to the partner or the closest people involved in the marriage but can also

lead to decreased productivity, psychological disorders, interpersonal conflicts or even divorce (Rahmah, Rahman, & Fitriah, 2017).

Based on data summarized from the Denpasar Population and Civil Registry Office and the Denpasar City Religious Court, it was recorded that from 2015 to 2019, the divorce rate in Denpasar City continued to increase. In 2015, the number of legal divorce cases was 705 cases. Then in 2016, the number increased to 740 cases. In 2017, divorce cases in Denpasar had recorded as many as 717 cases, and in 2018, divorce cases in Denpasar again increased, which was recorded as many as 884 cases. Meanwhile, from January to December 6 2019, the number of divorce cases recorded at the Denpasar City Religious Court was 504 (Widyaswara, 2019).

Stress caused by financial conditions and stress, in general, can be associated with poor marital quality (Ellison, Henderson, Glenn, & Harkrider, 2011). Clayson & Frost (1984) found that low-stress blue-collar workers had significantly higher marital satisfaction than high-stressed workers. In addition, the stress in everyday relationships such as division of household tasks, different goals and annoying habits of spouses tend to affect marital communication and marital quality of couples (Ledermann, Bodenmann, Rudaz, & Bradbury, 2010)

Randall & Bondenmann (2009) divide stress into external stress and internal stress. Bondenmann (1995, 2005 in Randall & Bondenmann 2009) and Story & Bradbury (2004, in Randall & Bondenmann 2009) state that external stress is the pressure outside the couple's relationship. This mainly includes interactions between partners and their social environment, which can indirectly affect the relationship, widespread stress between partners, and stresses on partners, such as arguments and conflicts.

High levels of external stress are associated with low levels of relationship

satisfaction (Randall & Bondenmann, 2009; Randall & Bodenmann, 2017). The pandemic is one of the external stressors for couples and families, especially for those directly affected and get fatal consequences (for example, those who contract the COVID-19 disease, become unemployed or experience financial losses). According to Setiawan & Rahmat (2011), there is a significant relationship between socioeconomic status and stress levels in young couples.

In addition to having an impact on financial stress, COVID-19 also impacts the psychological side. In their research, Zhang & Ma (2020) stated that 52.1% of study participants felt horrified and anxious because of the COVID-19 pandemic. Participants' overall scores indicated the impact of mild stress. One possible reason for this finding is that disease outbreaks were not considered severe when the study was conducted. In addition, participants may still be uninformed about the severity of the virus.

Research shows that significant life events cause psychological stress, notable events (such as a significant life change or death of a family member) are closely related to illness (Kangxing et al., 2020). COVID-19 has become a pandemic disease, and now more than 6.66 million patients are confirmed infected and have 402,855 deaths worldwide.

Both men and women who experienced changes in income due to disasters and had health complaints were associated with psychological stress. Household income from sources other than salary and rarely leaving home is associated with psychological stress in women. In contrast, young age, unemployment or job seeker status, and no informational support are associated with psychological stress in men (Ishiguro et al., 2019).

The COVID-19 pandemic as an external stressor can be a threat to family resilience. Walsh (1996 in Uyun 2020) defines family resilience as the ability of the

family to adapt and survive dynamically changing conditions and have a positive attitude towards existing challenges.

Uyun (2020) states three aspects of family resilience: physical resilience, social resilience, and psychological resilience. The aspect of physical resilience is related to the fulfilment of human physical needs such as food, clothing, housing and health. Losing a job or decreasing income during the pandemic will significantly affect the fulfilment of basic needs and family health. In addition, it can cause family stability to be disturbed. Losing a job can be emotionally exhausting, especially when things are full of uncertainty that can cause stress (Uyun, 2020). According to Child and Family Psychologist Anna Surti Ariani, it will affect all other family members when one family member is sick during this pandemic. The impact can be stress that results in anger in a spouse or child. Such circumstances can make the family situation uncomfortable (Kurniawan, 2020).

Aspects of social resilience are related to relationships between individuals oriented to religious values, effective communication and high commitment in the family (Uyun, 2020). Pusparini (in Safitri, 2020) stated that during the COVID-19 pandemic, there was an increase in domestic violence (KDRT). One reason is that family members meet too often, and the lack of positive communication between family members, making them vulnerable to conflict. Takariawan (in Husna, 2020) said that the family had maintained a balance with time of togetherness and time of separateness so far. These two times form harmony in the family, but the pandemic makes family members spend more time at home to reduce separation (separateness). Pusparini said that many families encounter conflict when they are together too often, even though, ideally, quarantine can strengthen relations between family members (Safitri, 2020).

Aspects of psychological resilience include the ability to overcome non-physical problems, control emotions positively, positive self-concept, and concern among family members (Uyun, 2020). Uncontrolled changes such as decreased income can affect individual emotional control. Individuals who have low emotional control tend to vent their anger on their partners in the form of verbal and physical violence. Conditions like this can cause stress to children and partners (Safitri, 2020).

The non-fulfilment of the three aspects of family resilience during the pandemic can be a burden that causes stress to family members and possibly causes the quality of marriages to be low. The pandemic causes many changes in people's lives in various aspects that also affect family life. This study was conducted to find out the effect of stress on marriage quality during the COVID-19 pandemic.

Methods

Participants

This study took a sample of 242 married people in Denpasar, consisting of 115 men and 127 women. With age distribution as follows: 21-30 years old = 32 people (13%); 31-40 years old = 79 people (33%); 41-50 years old = 72 people (30%); 51-60 years old = 55 people (23 %); 60+ years = 4 people (2%). Distribution based on the age of marriage as follows: 5-10 years = 83 people (34%); 11-20 years = 70 people (29%); 21-30 = 67 people (28%); 31-40 years = 22 people (9%).

Data Collection and Instruments

The data collection technique chosen to find data in this study is a questionnaire. Data collection uses the Marriage Quality Scale, consisting of 32 statements and the COVID Stress Scale, which consists of 38 statements.

The validity test used in this study is content validity by expert judgment. A trial

was conducted on 242 married people in Denpasar. Based on the item selection results, there were no items that needed to be dropped, so 38 items on the COVID Stress Scale were obtained consisting of 5 dimensions, namely: danger and contamination, Socioeconomic consequences, xenophobia, compulsive checking and reassurance-seeking, and traumatic stress symptoms about COVID-19. The Marriage Quality Scale consists of 2 dimensions, namely relations and welfare.

Sugiyono (2015) states that research instruments can be reliable if the instruments used to measure the same object can produce the same data when done repeatedly. Reliability test using Cronbach's alpha formula. The results obtained for the reliability of the COVID Stress Scale of 0.934 and the Marriage Quality Scale of 0.899.

Data Analysis

The data were analyzed through 3-steps: descriptive analysis, assumption check, and hypothesis testing.

Descriptive Analysis

Descriptive analysis is a data analysis technique that aims to describe or describe data (Setiawati, 2017). The categories of data that have been collected will be converted into interval data using the formula:

Table 1. Categorization

Category	Formula
Very High	$X > \mu + 1,5\sigma$
High	$\mu + 0,5\sigma < X \leq \mu + 1,5\sigma$
Medium	$\mu - 0,5\sigma < X \leq \mu + 0,5\sigma$
Low	$\mu - 1,5\sigma < X \leq \mu - 0,5\sigma$
Very Low	$X \leq \mu - 1,5\sigma$

μ : hypothetical mean

σ : standard deviation

Normality test

According to Setiawati (2017), the normality test is a test of the data to be analyzed, related to the distribution (spread) in the form of a normal curve. The

normality test of the data used the Kolmogorov-Sminorv formula with the help of SPSS 24.0. The data can be said to be normally distributed if the significance value is greater than 0.05 (Setiawati, 2017).

Linearity Test

A linearity test is used to determine the linearity of the data, namely, whether two variables have a linear relationship or not. The linearity test in this study uses the help of IBM Statistics SPSS 24.0. Two variables can have a linear relationship if the significance (Deviation for Linearity) is more than 0.05 (Purnomo, 2016).

Hypothesis testing

Hypothesis testing in this study uses simple linear regression analysis. A simple linear regression analysis test aims to predict the effect of one variable on another variable (Setiawati, 2017).

Findings

The following are the results of the descriptive analysis in the form of categorization of COVID stress variables and marital quality variables:

1. COVID Stress Variables

Table 2. Categorization of COVID-19 Stress

Category	Frequency	Percentage
Very High	0	0%
High	130	54%
Medium	76	31%
Low	29	12%
Very Low	7	3%

2. Marital Quality Variables

Table 3. Categorization of Marriage Quality

Category	Frequency	Percentage
Very High	241	99,6%
High	1	0,4%
Medium	0	0%
Low	0	0%
Very Low	0	0%

Normality Test Results

Based on the normality test results, a significance value of 0.075 was obtained, which was greater than 0.05. Following the decision-making basis for the Kolmogorov-Smirnov normality test, it can be concluded that the data in this study meet the assumption of normality.

Linearity Test Results

The significance value for the COVID stress variable with the marital quality variable was 0.131, greater than 0.05 or $p > 0.05$. Thus, it can be said that the COVID stress variable and the quality of marriage have a linear relationship.

Hypothesis Test Results

The results of hypothesis testing using linear regression analysis showed a significance value (Sig.) of 0.307, greater than 0.05. Thus, it can be concluded that there is no effect of COVID stress (X) on marriage quality (Y). The results of the analysis of the COVID Stress dimension with the quality of marriage are obtained as follows:

1. The significance value of the danger and contamination fears dimension is 0.758 ($p > 0.05$). It can be concluded that danger and contamination fears do not affect the quality of marriage.
2. The significance value of the dimension of fears about socioeconomic consequences is 0.401. It can be concluded that fears about

socioeconomic consequences do not affect the quality of marriage.

3. The significance value of the xenophobia dimension is 0.755 ($p > 0.05$). It can be concluded that xenophobia does not affect the quality of marriage.
4. The significance value of the traumatic stress symptoms dimension is 0.273 ($p > 0.05$). It can be concluded that traumatic stress symptoms do not affect the quality of marriage.
5. The significance value of the compulsive checking and reassurance seeking dimension was obtained at 0.102 ($p > 0.05$). It can be concluded that compulsive checking and reassurance seeking does not affect the quality of marriage.

Discussion

The results of the descriptive analysis showed that the stress felt by the subject tended to be in the high category, as many as 130 people or 54%. During a pandemic, many people exhibit fear and anxiety-related stress responses, which include: fear of infection, fear of coming into contact with objects or surfaces that may be contaminated, fear of strangers who may carry the infection, fear of the socioeconomic consequences of the pandemic, compulsive checking and seek information about possible pandemic-related threats, and symptoms of pandemic-related traumatic stress (Taylor, 2020).

The results of the descriptive analysis showed that more than half of the population sample had stress levels in the high category. These findings are similar to studies from China showing nearly 35% of the general population experienced moderate to severe levels of stress or anxiety-related symptoms in response to COVID-19 (Qiu et al., 2020; Wang et al., 2020). Another study in Italy showed that as many as 2012 (72.8%) respondents had stress levels in the medium category, 404

(14.6%) were in the high category, and 347 (12.6%) were in the very high category (Mazza, 2020).

Subjects with high-stress levels tend to feel worried about financial problems and worry if they or those closest to them are infected with the virus. In line with Taylor's research (2017), among various common causes of stress, financial difficulties are closely related to psychological stress in parents. The finding of a high level of stress on the subject was also caused by the weakening of the tourism sector due to decreased foreign tourist arrivals, causing hotels and other tourist attractions to lay off their employees. The Bali Province Manpower and Mineral Resources Office (Disnaker) said that until April 19, 124, people had been laid off, and 480 people had been laid off (Riza, 2020).

The descriptive analysis of marital quality showed that almost all subjects had a very high level of marital quality in the category of 239 people, or 99.6%. Meanwhile, in the high category, as many as one person or 0.4%. Marriage quality is a subjective evaluation of a husband or wife on the quality of their marriage, which can be carried out on several aspects: closeness and warmth of relationships, cooperation, respect, and welfare (Nurhayati, 2017). Referring to research conducted by researchers, subjects who have very high and high marital quality tend to have warm relationships, cooperate to face difficulties and respect each other. In addition, those who have a very high and high quality of marriage also show gratitude for their marriage, and they feel peaceful and comfortable living together with their partner.

The strong culture of each couple may influence the high quality of marriage in Balinese society. The life of the Balinese people is very thick with the teachings or moral values of *Tat Twam Asi*. *Tat Twam Asi* means you are me, and I am you, which contains the principles: joy and sorrow, mutual love, mutual honing, and mutual

care. This teaching contains a philosophy so that fellow humans can empathize with other humans (Adhi, 2016). *Tat Twam Asi* teaches that as humans, we can love each other or love other humans. This teaching implies that I am you and you are me, so treat others as you would like to be treated yourself. Couples who can empathize and love each other certainly have a high quality of marriage.

High levels of external stress are associated with low levels of relationship satisfaction (Randall & Bondenmann, 2009; Randall & Bodenmann, 2017). Ellison et al. (2011) mention that financial conditions and stress, in general, can be associated with poor marital quality. However, there is an interesting finding in this study, namely that although most of the respondents showed a high level of stress, it did not affect marriage quality. On the other hand, most of the subjects' marriage quality was in the very high category, 99.6%.

In their research, Yarber et al. (2020) found that although many individuals experienced stress due to the pandemic, overall marital emotional satisfaction remained the same. Most individuals report an increased sense of teamwork and connection. Overall, more participants agreed that the pandemic had a positive impact on their marriage. 74% of participants agreed the pandemic strengthened their marriage, and 82% agreed it made them feel more committed to their marriage. 85% agree that the pandemic helped them appreciate their partner more, helped them appreciate the good life they had before the pandemic and brought their family together.

The explanation for the findings in this study is that couples have good marital stress management. The management of marital stress is dyadic coping. Dyadic coping is a pattern of interaction between partners to cope with stressful situations (Bodenmann, 2005). Every marriage has problems, and how a married couple solves problems contributes to the marriage

quality. Couples who experience more significant stress show a decrease in marital happiness. However, problem-solving experiences can increase resilience in the face of subsequent stressors and affect marital adjustment (Neff & Broady, 2011).

Research conducted by Levesque et al. (2014) mentions that dyadic coping influences marital satisfaction; namely, the support from a partner will make individuals more confident in dealing with perceived stress to feel satisfaction in their marriage. In addition, Nugroho (2019) research also states that the more often dyadic coping is carried out by one or both partners, the higher the level of marital quality. The partner's dyadic coping or social support is significantly associated with high marital quality (Bodenmann, 2006). Bodenmann (2005) states that dyadic coping has two main objectives: reducing the stress of each partner and improving the quality of a relationship.

In addition, the communication factor also plays a role in producing a quality marriage. Communication in marriage has long been found to be a factor that affects the quality of marriage (Fowers, 1998 in Nurhayati, 2019). Communication is an essential aspect in relationships to build positive and close relationships (Fowers & Olson in Alkhusna & Wahyuningsih 2007).

There is moral teaching in Balinese society called *Tri Kaya Parisudha*, which means that humans can think, say and act well. Thus, in communicating with other individuals, it is expected to say good things to create harmony with others (Sentana, 2017). Dewi & Sudhana (2013) mention that effective communication between husband and wife makes interpersonal relationships good to realize harmony in marriage. Couples who apply *Tri Kaya Parisudha*'s ethical teachings, especially in saying good, are more likely to find harmony in their marriage.

In addition, there are factors of spirituality and religiosity that affect the level of quality of marriage. According to an

international survey, Indonesia has the most religious population (Damarjati, 2020). It is undeniable that Balinese people are very thick with religious activities, so that Bali is one of the spiritual tourism destinations because tourists can see Balinese ritual activities almost every day (Budiasih, 2017). Prayer, rituals and religious beliefs can help a person cope when experiencing life's stress because of hope and comfort (Rammohan, Rao & Subbakrishna, 2002 in Utami, 2012). Istiqomah & Mukhlis (2015) found that there was a relationship between religiosity and marital satisfaction. Couples with a high level of religiosity will be more satisfied with their marriage (Istiqomah & Mukhlis, 2015). Most of the subjects in this study felt grateful for their marriage to maintain the quality of their marriage in the high category amidst the stress due to the pandemic.

Free time spent with a partner helps increase closeness and intimacy (Fowers & Olson in Hepi Wahyuningsih, 2007). According to Johnson (2005), there are many different reasons why couples do or do not participate in leisure activities together. Work problems can also be considered a barrier to joint activities. During the pandemic, many people are laid off from work to have more free time to spend with their partners. Shared leisure time is an essential component of marital satisfaction between couples. Free time allows them to develop common interests and provides opportunities for healthy communication and spending quality time together (Sharaievskaya, Kim, & Stodolska, 2013)

Couples who have been in a relationship longer and older tend to have lower levels of conflict (Kamp Dush & Taylor, 2012) and manage conflict more constructive way than younger couples (Birditt et al., 2010). Subjects in this study had a marriage age of more than or equal to 5 years, sufficient time for marriage adjustment. In the first five years of marriage, individual adjustments and

expectations before marriage will be tested, and couples will also learn ways to deal with crises or conflicts (Kendhawati & Purba, 2019). Individuals may know more about their partners through shared problem-solving experiences, mainly how couples usually deal with marital problems and life in general (Delatorre & Wagner, 2018). The length of marriage age in the subject may help maintain marriage quality in the high category when the situation is stressful.

Conclusion

Based on the research results, it can be concluded that the COVID stress variable does not significantly affect the quality of marriage in married individuals in Bali. Therefore, although the stress variable in most subjects showed a high category, it did not affect the marital quality variable.

Suggestion

Based on the research that has been done, the researcher has several suggestions as follows:

1. For couples: implementing marital stress management to maintain the quality of marriage.
2. For government institutions: (a) Conduct counselling, seminars and training classes for married couples and prospective brides, (b) Expand the reach of mental health services by facilitating access, such as holding teleconsultation.
3. For future researchers: (a) Explore or explore other factors that may affect the quality of marriage in Bali. (b) Expanding the range of respondents so that the results obtained more generalize to the population.

References

- Adhi, M.K. (2016). *Tat Twam Asi: Adaptasi Nilai Kearifan Lokal dalam Pengentasan Kemiskinan Kultura*. Seminar Nasional
- Riset Inovatif (Senari) Ke-4 Tahun 2016
- AlKhusna & Wahyuningsih, H. (2007). Kualitas Perkawinan Individu yang Menikah tanpa Pacaran. *Psikologika*, 24, 133-145
- Birditt, K. S., Brown, E., Orbuch, T. L., & McIlvane, J. M. (2010). Marital conflict behaviors and implications for divorce over 16 years. *Journal of Marriage and Family*, 72(5), 1188–1204. doi: 10.1111/j.1741-3737.2010.00758.x
- Bodenmann, G., Pihet, S., & Kayser, K. (2006). The Relationship Between Dyadic Coping and Marital Quality: A 2-Year Longitudinal Study. *Journal of Family Psychology*, 20(3), 485-493. 10.1037/0893-3200.20.3.485
- Bodenmann, G., Revenson, T., & Kayser, K. (Eds.). (2005). *Couples Coping with Stress: Emerging Perspectives on Dyadic Coping*. Washington, DC: APA
- Budiasih, M. (2017). *Parivisata Spiritual di Bali*. IHDN, 70-80.
- Clayson, D., & Frost, T. (1984). Impact of Stress and Locus of Control on the Concept of Self. *Psychological Reports*, 55(3), 919–926. doi:10.2466/pr0.1984.55.3.919
- Damarjati, D. (2020). Survei 34 Negara: Orang Indonesia Paling Religius. Detiknews. Retrieved from: <https://news.detik.com/berita/d-5109802/survei-34-negara-orang-indonesia-paling-religius?single=1>
- Delatorre, M.Z., & Wagner, A. (2018). Marital Conflict Management of Married Men and Women. *Psico-USF*, 23(2), 229-240. doi: 10.1590/1413-82712018230204
- Dewi, N. R., & Sudhana, H. (2013). Hubungan Antara Komunikasi Interpersonal Pasutri dengan Keharmonisan dalam Pernikahan. *Jurnal Psikologi Udayana*, 1(1), 22-31

- Ellison, C., Henderson, A., Glenn, N., & Harkrider, K. (2011). Sanctification, Stress, and Marital Quality. *Family Relation*, 404-420. doi:10.1111/j.1741-3729.2011.00658.x
- Herlanda, B. F. (2017). *Hubungan Kualitas Perkawinan dan Intensi Berselingkuh pada Pernikahan*. Skripsi. Universitas Sanata Dharma
- Istiqomah, I., & Mukhlis. (2015). Hubungan Antara Religiusitas dengan Kepuasan Perkawinan. *Jurnal Psikologi*, 11(2), 71-78
- Johnson, H.A. (2005). *The Contribution of Couple Leisure Involvement, Leisure Time, and Leisure Satisfaction to Marital Satisfaction*. Thesis, Brigham Young University
- Kamp Dush, C. M., & Taylor, M. G. (2012). Trajectories of Marital Conflict Across the Life Course: Predictors and Interactions with Marital Happiness Trajectories. *Journal of Family Issues*, 33(3), 341-368. doi: 10.1177/0192513X11409684
- Kangxing, S., Tao, L., Dan, L., Fengsu, H., Fengying, B., Stratton, T., . . . Yang, J. (2020). Psychological Stress and Gender Differences during COVID-19 Pandemic in Chinese Population. *medRxiv*. doi:10.1101/2020.04.29.20084061
- Kendhawati, L., & Purba, F.D. (2019). Hubungan Kualitas Pernikahan dengan Kebahagiaan dan Kepuasan Hidup Pribadi: Studi pada Individu dengan Usia Pernikahan di Bawah Lima Tahun di Bandung. *Jurnal Psikologi*, 18(1), 106-115.
- Kurniawan, I. (Mei 2020). Pandemi Corona Menguji Ketahanan Keluarga. Prfmnews-id. Retrieved from: <https://prfmnews.pikiran-rakyat.com/nasional/pr-13383136/pandemi-corona-menguji-ketahanan-keluarga?page=2>
- Ledermann, T., Bodenmann, G., Rudaz, M., & Bradbury, T. (2010). Stress, Communication, and Marital Quality in Couples. *Family Relation*, 59(April 2010), 195-206. doi:10.1111/j.1741-3729.2010.00595.x
- Mazza, C., Ricci, E., Biondi, S., Colasanti, M., Ferracuti, S., Napoli, C., Roma, P., (2020). A Nationwide Survey of Psychological Distress among Italian People during The COVID19 Pandemic: Immediate Psychological Responses and Associated Factors. *Int. J. Environ. Res. Public Health*, 17(9). doi: 10.3390/ijerph17093165.
- Nurhayati, S. R., Faturochman, & Helmi, A. F. (2019) Marital Quality: A Conceptual Review. *Buletin Psikologi*, 27(2), 109 – 124. doi:10.22146/buletinpsikologi.37691
- Okatarina, L.P., Wijaya, M., & Demartoto, A. (2015). PEMAKNAAN PERKAWINAN: Studi Kasus pada Perempuan Lajang yang Bekerja di Kecamatan Bulukerto Kabupaten Wonogiri. *Jurnal Analisa Sosiologi*, 4(1), 75-90
- Qiu, J., Shen, B., Zhao, M., Wang, Z., Xie, B., & Xu, Y. (2020). A Nationwide Survey of Psychological Distress among Chinese People in the COVID-19 Epidemic: Implications and Policy Recommendations. *General Psychiatry*. doi: 10.1136/ gpsych-2020-100213
- Rahmah, A. A., Rahman, A. A., & Fitriah, E. A. (2017). Prediktor Kualitas Pernikahan: Penyesuaian Pernikahan dan Nilai Personal. *Jurnal Psikologi*, 13(2), 92-97.
- Randall, A., & Bodenmann, G. (2009). The Role of Stress on Close Relationships and Marital Satisfaction. *Clinical Psychology Review*, 29(2), 105-115. doi:10.1016/j.cpr.2008.10.004
- Randall, A., & Bodenmann, G. (2017). Stress and Its Associations with Relationship Satisfaction. *Current Opinion in Psychology*, 13. doi:10.1016/j.copsyc.2016.05.010

- Riza, A. (April 2020). Imbas Corona, 19.124 Karyawan di Bali Dirumahkan dan 480 PHK. *Detiknews*. Retrieved from: <https://news.detik.com/berita/d-4968769/imbas-corona-19124-karyawan-di-bali-dirumahkan-dan-480-phk>
- Safitri, G.L. (April 2020). Menjaga Ketahanan Keluarga saat Pandemi COVID-19. *Pontianakpost*. Retrieved from: <https://pontianakpost.co.id/menjaga-ketahanan-keluarga-saat-pandemi-covid-19/>
- Sentana, G.D.D. (2017). Penanaman Konsep Tri Kaya Parisudha dalam Tradisi Mareraosan. *Jurnal Pendidikan Hindu*, 4(2), 33-39. doi: [10.25078/gw.v4i2.1056](https://doi.org/10.25078/gw.v4i2.1056)
- Setiawan, F. P., & Rahmat, I. (2011). Hubungan Status Sosial Ekonomi Keluarga dengan Stres pada Pasangan Usia Muda di Desa Giricahyo Purwosari Gunungkidul. *Naskah Publikasi*.
- Setiawati, F.A. (2017). *Statistika Terapan untuk Penelitian Pendidikan dan Sosial*. Yogyakarta: Parama Publishing.
- Sharaievskaa, I., Kim, J., & Stodolska, M. (2013). Leisure and Marital Satisfaction in Intercultural Marriages. *Journal of Leisure Research*, 45(4), 445-465. doi: 10.18666/jlr-2013-v45-i4-3894
- Sugiyono. (2015). *Metode Penelitian Pendidikan: Pendekatan Kuantitatif, Kualitatif dan R&D*. Bandung Alfabeta
- Taylor, M., Stevens, G., Agho, K., & Raphael, B. (2017). The Impacts of Household Financial Stress, Resilience, Social Support, and Other Adversities on the Psychological Distress of Western Sydney Parents. *International Journal of Population*, 2017, 1-12. doi: 10.1155/2017/6310683
- Taylor, S., Landry, C., Paluszek, M., Fergus, T., McKay, D., & Asmundson, G. (2020). Development and Initial Validation of the COVID Stress Scales. *Journal of Anxiety Disorder*, 72, 1-7. doi:10.1016/j.janxdis.2020.102232
- Utami, M.S. (2012). Religiusitas, Koping Religius, dan Kesejahteraan Subjektif. *Jurnal Psikologi* 39(1), 46-66
- Uyun, M. (Mei 2020). *Ketahanan Keluarga dan Dampak Psikologis dimasa Pandemi Global*. Disampaikan dalam rangka Webinar Program Doktor Psikologi Pendidikan Islam, di Universitas Muhammadiyah Yogyakarta.
- Uyun, M. (Mei 2020). *Ketahanan Keluarga dan Dampak Psikologis dimasa Pandemi Global*. Disampaikan dalam rangka Webinar Program Doktor Psikologi Pendidikan Islam, di Universitas Muhammadiyah Yogyakarta.
- Widyaswara, I.W.E & Sadnyari, I.A.M (Ed). (Desember 2019). Penyebab 884 Kasus Pasangan Cerai di Denpasar 2018, Faktor Ekonomi hingga Liburan, Suami Perlu Tahu. *Tribun-bali.com*. Retrieved from: <https://bali.tribunnews.com/2019/12/16/penyebab-884-kasus-pasangan-cerai-di-denpasar-2018-faktor-ekonomi-hingga-liburan-suami-perlu-tahu?page=2>.
- Yarber, W., Sanders, S., Milhausen, R.R., Graham, C.A., & Vanterpool, K., Kennedy, M., Kinsey Institute's Researches. (2020). *Impact of the COVID-19 Pandemic on Marital Quality*. Disampaikan dalam pertemuan tahunan Society for the Scientific Study of Sexuality
- Zhang, Y., & Ma, Z. F. (2020). Impact of the COVID-19 Pandemic on Mental Health and Quality of Life among Local Residents in Liaoning Province, China: A Cross-Sectional Study. *International Journal of Environmental Research and Public Health*, 17(7). doi:10.3390/ijerph17072381



Application of Internet-based Cognitive Behavior Therapy Approaches for Female Adolescent with Major Depressive Disorder

*Khadijah Auliaur Rohmmaani*¹, *Cut Nurul Kemala*²

¹ Department of Psychology, Universitas Indonesia
Jl. Lingkar Kampus Raya Jl. Mawar No. 538, Pondok Cina,
Kecamatan Beji, Kota Depok, Jawa Barat 16424

¹ key.khadijah@gmail.com, ² cut.kemala@ui.ac.id

Abstract

The purpose of this study was to measure the decrease in depression symptoms experienced by the participant before and after following the intervention by applying the Internet-based Cognitive Behavior Therapy (iCBT) approach. The participant was HN, a 14-year-old female adolescent who refused school due to major depressive disorder. The design of this study was a single-subject design with pre-post measurement. The intervention program was held eight sessions with a pre-session one day before, and a follow-up session was given two weeks after. The instruments used for this research are Beck Depression Inventory-II (BDI-II) to measure depression symptoms and Mood-o-meter, which serves as a mood rating to measure HN's mood fluctuation. This study showed depression symptoms decreased and positive mindset change and behavior towards the social environment at the end of the intervention program.

Keywords: *adolescent; depression; internet-based cognitive behavior therapy*

Introduction

Depression are the leading cause of death rates caused by disability in children and adolescents, especially females (Gore et al., 2011). About 3% of the world's school-age population suffers from depression, and there is a possibility that this number will increase, especially for adolescent girls (Bor et al., 2014; Polanczyk et al., 2015). Individuals who experience depression will also experience disturbance in their daily functioning. This includes decreased school attendance, especially absenteeism and truancy for no reason, in children and adolescents with depression (Finning et al., 2019).

Psychological examinations administered on HN showed that HN had fulfilled major depressive disorder diagnostic criteria of DSM 5 (APA, 2013). At the beginning of the examination, her parents complained that HN refused to go to school for three weeks in a row, starting in the first week which she complained

about various physical ailments and skipping school twice. After undergoing a series of psychological examinations, it was found that HN's refusal to go to school resulted from the major depressive disorder she was experiencing.

Based on the examination results, it was found that HN had a false belief that she was not loved. HN often reveals that she felt different from other teenagers, so she cannot be accepted and liked by other people around her. HN's false belief arises from the accumulation of negative experiences she has experienced. Based on these negative experiences and formed beliefs, HN has the assumption that she should leave before being shunned or that she should endure her problem in silence. These two assumptions are rooted in her belief that no one can help her problem. This leads to HN developing a pattern of avoiding problems by withdrawing from her social environment as her coping

strategy. Figure 1 explains HN's cognition and its' antecedents in detail. Therapy that focuses on changing unhelpful ways of thinking, such as Cognitive Behavior Therapy (CBT; Beck & Beck, 2011), is considered to help HN reduce her symptoms of depression.

CBT was developed as an effective therapy for depression (Beck & Beck, 2011). However, other intervention techniques were also available to treat depression in adolescents, such as Interpersonal Psychotherapy (IPT). The IPT technique focuses on teaching communication skills and building interpersonal relationships so that the client can build and maintain positive social relationships and manage interpersonal stressors associated with their depression (Mufson et al., 2004). Based on the results of the Inventory of Peer and Parent Attachment (IPPA) filled in by HN, it is revealed that HN tends to have negative interpersonal relationships with those around her. It was rooted in the isolation that HN feels when she is with them, not due to the lack of trust or poor communication skills. HN also tends to think negatively of herself and others. Therefore, CBT is more suitable to help HN with her problems, as CBT was designed to correct unhelpful thinking patterns and change her behavior (Selph & McDonagh, 2019).

CBT has a high success rate compared to other techniques, even for improving social functioning and self-esteem, especially for treating depression in adolescents (Kemp, O'Connor, Kritikos, Curren, & Tompson, 2017). This technique is suitable for HN's needs, as HN's examination results showed a pattern of social avoidance and very low self-esteem. CBT techniques for treating depressive disorders in adolescents have higher effectiveness when using behavioral activation and challenging thoughts (Oud et al., 2019). However, the current state of the COVID-19 pandemic does not allow

examiners to meet face-to-face with HN. Therefore, the CBT was administered as an Internet-based Cognitive Behavior Therapy (iCBT).

iCBT intervention techniques for depressive disorders are generally developed based on CBT intervention techniques for depressive disorders, which have similarities based on providing interventions, behavioral activation, cognitive restructuring, and prevention of relapse of depressive disorders (Andersson, Wagner, & Cuijpers, 2016). The difference between CBT intervention techniques and iCBT lies in three things that must be met in implementing iCBT interventions: a safe electronic platform, appropriate program delivery methods, and guidance from therapists (Kumar et al., 2017). The iCBT intervention technique is given through online media using applications or websites that teenagers can access using cellphones or PCs by ensuring the data is encrypted so that its security is guaranteed. The program provided to clients in the iCBT intervention is tailored to the needs and abilities of the client, such as the use of text, audio, and audio-visual in providing worksheets that are easily accessible and understood by clients. In addition, in carrying out the iCBT intervention technique, the therapist also has the responsibility to guide the client in undergoing the intervention by providing a clear structure, support throughout the program's implementation, and a precise time limit for completion of tasks and interventions.

The use of technological means in communicating in the iCBT intervention technique is preferred by adolescents, especially adolescent girls, to conduct discussions and share personal problems compared to face-to-face meetings (Topooco et al., 2018). Based on the use of text message-based helplines for adolescents, it is known that adolescents feel more comfortable doing written communication and do not feel pressured in seeking help because they do not need to

deal directly with therapists (Sindahl, 2013). The application of iCBT can also increase adolescents' autonomy in expressing their feelings and thoughts because adolescents are in a familiar environment (such as at home) and reduce the stigma they may receive should they see a therapist (Bradley, Robinson, & Brannen, 2012). This shows that the iCBT intervention technique effectively reduces depressive symptoms experienced by adolescents and can overcome barriers in adolescents to face-to-face therapy.

This study aimed to measure changes in depressive symptoms experienced by participants before and after following the

intervention by applying the iCBT intervention technique approach. The researcher formulated a hypothesis to be tested in this study. Participants experienced a decrease in symptoms of depression and changes in mindset and behavior in dealing with the surrounding social environment after participating in the intervention using the iCBT technique approach. We hope that the results of this study can serve as a reference for the application of internet-based interventions and the use of technology to reduce symptoms of depression and change mindsets to become more positive in children with similar problems.

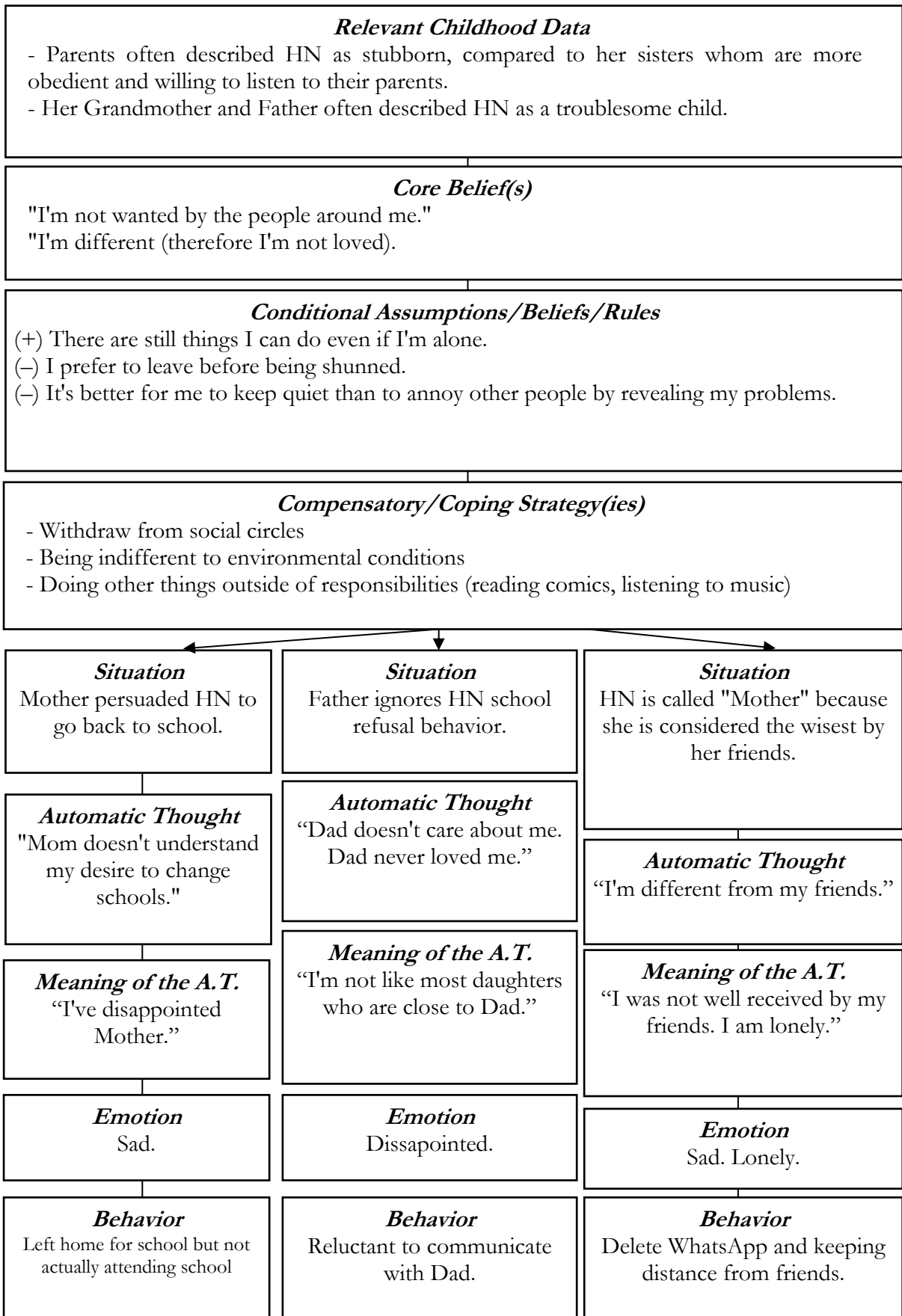


Figure 1. Conceptualization of HN's Problem

Methods

Participants

The participant in this study was a 14-year-old girl with the initials HN. At the time of the examination conducted at the Sukmajaya Health Center, HN was a student who was in the 8th grade of Junior High School (SMP) in Depok, West Java. Her mother brought HN to do a psychological examination because of complaints of refusing to go to school for no reason, which had been going on for three weeks. A psychological examination is carried out to formulate HN problems through interviews, observations, intelligence tests, and personality tests. Interviews were conducted on various sources: HN herself, HN's mother, and HN's teacher, who recommends HN to receive a psychological examination to find out the root cause of her school refusal. Observations were made using the Early Adolescent HOME (EA-HOME) instrument when the researcher visited HN's house and interviewed HN's mother. The intelligence tests given to HN are Raven's Standard Progressive Matrices (SPM) Test and the Wechsler Intelligence Scale for Children - Revised (WISC-R) Test. HN also underwent a personality test using projection tests in the form of Forer Sentence Completion Test (FSCT), Draw a Person (DAP), Tree test (BAUM), and House-Tree-Person (HTP). In addition, HN filled out several inventory tests in the form of Self-esteem Inventory (SEI), Inventory of Peer and Parent Attachment (IPPA), School Refusal Assessment Scale-Revised (SRAC-R), and Beck Depression Inventory-II (BDI-II).

The results of the psychological examination of HN showed that HN met the criteria for major depressive disorder. HN appears to display persistent negative emotion almost daily for more than two weeks (mood, sad, crying, irritable, blank stare) that results in changes in daily life (withdrawing from family and friends) and

disturbing daily functioning (refusing to go to school). HN also loses interest or pleasure in almost anything (not wanting to chat with friends, no longer writing stories, not wanting to go to school), having loss of appetite, trouble sleeping at night (difficulty sleeping, frequently waking early in the morning, staying tired even after sleeping), tiredness or loss of energy (sleeping all day, bathing less often, getting sick more quickly), excessive feelings of helplessness and guilt (feeling troublesome and upsetting to parents), and indecisiveness nearly every day (difficult to make logical decisions despite knowing the positives and negatives). The depressive symptoms shown by HN make it difficult to function optimally as a teenager who generally enjoys social interaction with friends and is involved in various academic and non-academic activities. HN's refusal to go to school was resulted from the symptoms of depression she experienced. This can be seen from HN first showing an irritable attitude, daydreaming a lot, losing her appetite, and often complaining of physical pain (diarrhoea, back pain, frequent dizziness) and truancy twice before showing refusing to go to school.

Research Design

The research design used was a single subject design with pre-post test measurements to examine the effect of applying the iCBT approach in reducing depressive symptoms experienced by HN. The intervention program with the iCBT approach given to HN was designed based on the iCBT program design tested by Topooco et al. (2018) on adolescents with depressive disorders. The researcher intervened with the iCBT approach for two months and consisted of nine sessions with one pre-session and eight intervention sessions. The intervention was given through WhatsApp chat with a duration of 60 minutes for each session. Pre-session and first session were

conducted sequentially in the same week, followed by seven further sessions conducted once a week for eight weeks. During the eight-week session, HN receives psychoeducation on depression, behavioural analysis, behavioural activation, cognitive restructuring, anxiety psychoeducation, emotion recognition, and relapse prevention treatment. Afterwards, follow-up sessions were carried out for two weeks after the intervention session was finished to assess HN's condition in maintaining the intervention results. The decrease in depressive symptoms experienced by HN will be seen from the pre-intervention and post-intervention results of the BDI-II Scale, which HN filled in during the pre-session and the final session of the intervention. Researchers also provide a mood rating to HN before and after each intervention session to see changes in HN's mood before and after each session, as well as the average mood felt by HN for the entire session. This research has passed the ethical review process approved by the Faculty of Psychology, University of Indonesia through letter number 951/FPsi.Komite Etik/PDP.04.00/2020.

Instruments

1. *Beck Depression Inventory-II* (BDI-II)

The Beck Depression Inventory-II (BDI-II; Beck, Steer, & Brown, 1996) scale is a self-report questionnaire containing 21 items on a 4-point scale

from 0 (no symptoms) to 3 (severe symptoms) on each item. BDI-II was scored by adding the highest rating on all 21 items with a minimum score of 0 and a maximum score of 63. The higher the score indicates the severity of depression symptoms felt by the individual. In individuals diagnosed with depression, a total score of 0-13 indicates minimal depression, a total score of 14-19 is mild depression, 20-28 is moderate depression, and 29-63 is severe depression (Jackson-Koku, 2016).

The results of the validity test showed that BDI-II was significantly correlated with the Minnesota Multiphasic Personality Inventory-D (MMPI-D) and Hamilton Depression Rating Scale (HDRS), and the reliability results of Cronbach Alpha showed that the BDI-II was proven to be reliable $\alpha = 0.92$ in the clinical population and $\alpha = 0.93$ in the non-clinical population.

2. *Mood-o-meter*

Mood-o-meter or mood rating is a measurement of mood in the form of a self-report using a 10-point Likert scale, from a scale of 1 (sad) to 10 (happy). The higher the value given, the happier the mood. Mood rating is given to quantitatively track the mood changes felt by HN before and after participating in the intervention and the average mood felt by HN during the intervention process. Mood measurements were given to HN as mood serves as one of the main symptoms of major depressive disorder.

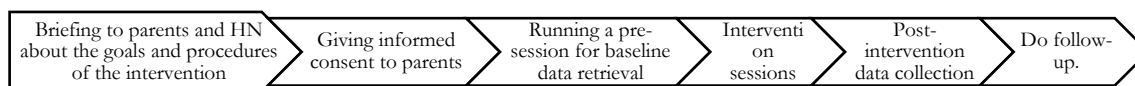


Figure 2. Research Procedure

Procedure

In Figure 2, the flow of the research procedures carried out has been described. There are three significant parts carried out in the intervention, namely before the intervention, the implementation of the intervention, and after the intervention. Before the intervention, HN and her parents were briefed on the objectives and procedures for the intervention. Parental informed consent was also obtained during this process. Pre-session with HN was conducted to provide detailed information of the process and acquire baseline data using BDI-II.

During the intervention, the researcher provided a module book containing session material and worksheets that HN needed to complete during the session and as homework assignments. The module book compiled by the researcher refers to the worksheet designed by Stallard (2019) by adjusting the program objectives and participant

needs. The researcher designed the activities and the number of intervention sessions for HN by replicating Topooco et al. (2018) iCBT intervention design.

The process of designing and implementing the intervention to HN was supervised by a senior psychologist who was the co-author of this study. At the end of the intervention, HN was asked to fill in the BDI-II Scale as post-test. Table 1 describes in detail the activities and objectives of each session. The last part is a post-intervention activity that includes debriefing regarding the intervention results and improvement that HN needs to maintain. The follow-up session also includes activities after the intervention. During the post-intervention session, the researcher gave the BDI-II Scale to be filled again and allowed HN to ask questions and discuss her development and her condition after the intervention was completed.

Table 1.
Activity Overview and Success Indicator

Session	Activity Overview	Success Indicator
1	Introduction to the mood-o-meter, filling out the mood-o-meter before and after the session, discussing depression and writing about HN depression experiences, and giving homework	HN can assess the mood she feels, is able to tell experiences (feelings, thoughts, behavior) during depressive episodes, and can name some of the things that trigger her depression
2	Filling the mood-o-meter before and after the session, discussion of Session 1 homework, filling out worksheets, explaining material about schema dysfunction, and giving homework	HN can explain the homework for session one that she has done and can give examples of experiences/events about her dysfunctional scheme
3	Filling in the mood-o-meter before and after the session, discussion of Session 2 homework, giving material on behavioural activation, filling out worksheets on the CBT module, and giving homework	HN can classify the negative thoughts she has from the homework she has done and can provide a mood value for the activities she does

Session	Activity Overview	Success Indicator
4	Filling in the mood-o-meter before and after the session, discussion of Session 3 homework, filling out worksheets, planning activities for the next week, and giving homework	HN completes homework from Session three without missing, has a suggestion regarding the activities to be carried out for the next week, is able to give a mood rating for each activity she does and has a recommendation regarding the steps that can be taken to break down the challenging tasks
5	Filling in the mood-o-meter before and after the session, Session 4 homework discussions, filling out Google Forms about wrong ways of thinking, giving materials on wrong ways of thinking, filling out worksheets, and giving homework	HN can write down her positive and negative thoughts about himself, the future, and what she does and can provide examples of her experiences that match the type of wrong way of thinking she has.
6	Filling the mood-o-meter before and after the session, Session 5 homework discussion, giving psychoeducational materials on anxiety and relaxation techniques, filling out worksheets and giving homework	HN can tell her anxiety or recognize the symptoms of anxiety she feels and can name some ways she can be used to become calmer when anxious
7	Filling in the mood-o-meter before and after the session, Session 6 homework discussions, filling out worksheets and giving homework	HN can name several emotions, can determine the emotions she feels towards the person/situation mentioned, and can name the problem and have several solution ideas to deal with the problem
8	Filling in the mood-o-meter before and after the session, discussion for Session 7 homework, discussion of the book "Loving the Wounded Soul", conducting a review of the CBT interventions that have been undertaken, and filling out the BDI-II Scale using google form	HN can explain the signs of depression symptoms she is experiencing and be able to mention solutions to prevent relapse, can state the purpose of the CBT intervention and the impression she feels during the intervention, and fill out the BDI-II Scale

Findings

Overall, it can be said that the intervention with the iCBT approach given to HN succeeded in reducing the symptoms of depression she experienced and changing HN's behavior towards the social environment around her due to a change in her mindset to be more positive.

A more detailed explanation of the implementation of the session will be discussed further in the next section. The reduction in depressive symptoms was indicated by a decrease in BDI-II score and an increase in Mood-o-meter average score over the entire session. Changes in behavior and a more positive mindset towards the environment were shown by HN based on the discussion HN had with

the researcher that she had returned to attend meetings with her family and from the results of the worksheets completed by HN in the CBT module given to HN.

Intervention Result

In the first session, HN can measure her mood with a value of 1-10. HN can explain thoughts, feelings, and thoughts related to the symptoms of depression they are experiencing. HN said that the trigger for her depression was her family's negative reactions and comments, especially her grandmother, about her failure to attend the same boarding school as her cousin.

In the second session, HN could conclude that her failure to attend a boarding school formed her mind that she is a failure and always disappoints her family. These negative thoughts made her feel sad, angry, and disappointed with her own self, so that she began to limit her interactions with others for fear of being judged by others. HN has a schema dysfunction that she will always fail, especially at school.

In the third session, HN was able to tell some of the experiences that triggered the dysfunction of her schema. HN can recognize various things that affect her mood and assess the mood of various activities she often does. HN realized that she needed to make an effort to maintain her good mood to complete her various tasks well.

In the fourth session, HN can identify events that can lower her mood and try to do various activities to improve her mood. HN had difficulty figuring out the various stages she could go through to do a difficult task and always gave excuses that she could not do the task even though it had been broken down into stages. HN began to face her fears about going to school by being open about her thoughts and feelings.

In the fifth session, HN wrote positive things she could do and words of

encouragement to face her fears. HN tries to do various fun activities that can improve her mood. HN said that writing down her positive and negative thoughts was difficult because there were various contradictions in her mind, but HN managed to group the thoughts together.

In the sixth session, HN was able to assess that her negative thoughts were part of the thinking errors she had when trying to find supporters and opponents of these thoughts. HN identified sources of support that she could feel comfortable with and learned some techniques to calm down when she felt anxious.

In the seventh session, HN recognized the body's reactions and assessed the intensity of the various emotions listed on the worksheet, namely happy, sad, angry, and anxious. HN can write down several solutions that she can do to solve the problems she is facing.

In the eighth session, HN can identify the main problems she has, write down possible solutions, and weigh the positive and negative consequences she may face to determine practical solutions that she can take.

Quantitative Results

1. Beck Depression Inventory-II (BDI-II)

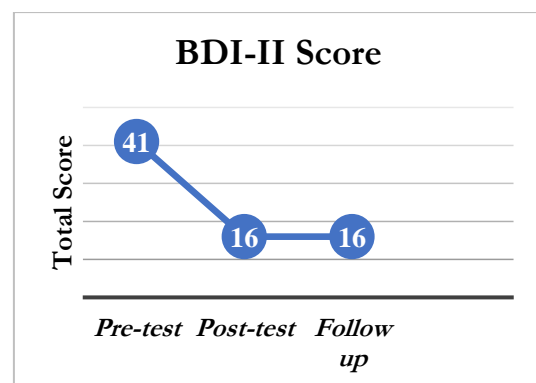


Figure 3. Total BDI-II Score on HN

The total BDI-II score obtained by HN indicates the severity of the

symptoms of depression she is experiencing. The overall results of the total BDI-II score on HN when pre-test, post-test, and follow-up can be seen in Figure 3. Based on the interpretation of the BDI-II total score from Beck (in Jackson-Koku, 2016), at the time of the pre-test, HN was experiencing symptoms of severe depression (total score of 41 on the BDI-II Scale). At the post-test, HN was said to have mild depressive symptoms (total score of 16 on the BDI-III Scale). After finishing all the sessions, a follow-up assessment with HN showed she had been able to sleep well, felt fresher, no longer felt sad and guilty all the time, did not cry often, no longer felt like a failure, no longer felt numb to the conditions that irritate her, no longer worry about her health condition, no longer have to force herself to do something, and have started to be able to enjoy the activities she previously unable to enjoy.

At the time of follow-up, HN still reported mild depressive symptoms with a total score of 16 on the BDI-II Scale, equal to that of the post-test. These results indicate that the intervention with the iCBT approach given to HN succeeded in reducing the depressive symptoms experienced by HN from severe to mild levels and still made the depressive symptoms felt by HN persist at the same level for two weeks after the intervention program was completed. HN still reported some symptoms of depression such as returning to trouble falling asleep by waking up one to two hours earlier than usual and having trouble getting back to sleep, feeling more failure than others, crying more and being tired than usual. However, in the last two weeks, HN feels that she can work better than usual, no longer feels terrible in appearance, feels easier to make decisions, and has more interest in other people.

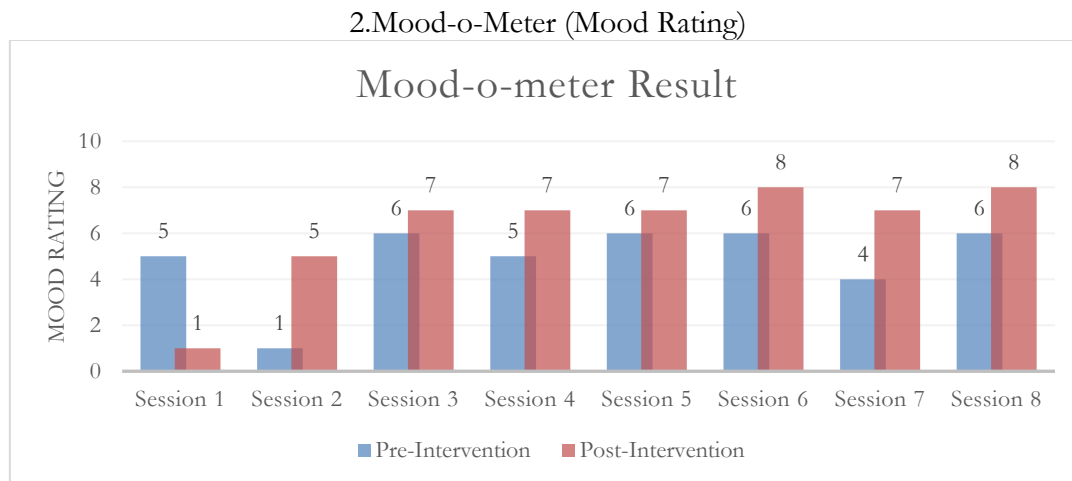


Figure 4. HN's Mood Rating Results

HN was asked to rate her mood at each intervention session before starting the intervention session and after finishing the intervention session. It aims to monitor fluctuations in HN feelings quantitatively, as one of the symptoms of depression is a continuous feeling of depression or numbness. In addition, the researcher also asked the specific reasons

for HN's mood. In general, HN reported an increase in the mean mood score before and after the intervention session ($M_{\text{before}} = 4.9$; $M_{\text{after}} = 6.2$). Most of the reasons for HN's improved mood were that she could master the tasks given during the sessions and liked the intervention program.

The overall results of the mood-ometer before and after the intervention can be seen in Figure 4. Initially, in session 1, HN had a normal mood (mood score = 5), but at the end of the session dropped 4 points to sad (mood score = 1). The drop was due to HN being reminded of the experience that was the cause of her current depression. In session 2, initially, HN felt sad (mood score = 1) because her parents forgot that HN followed the intervention program with a regular schedule every Thursday. It made HN think that her parents did not support her, and she felt she was struggling alone in the healing process from depression. However, at the end of the session, HN's mood score increased 4 points to normal (mood score = 5) after studying schema dysfunction and realizing that she had schema dysfunction based on some past experiences. In session 3, HN had a slightly happy mood score (mood score = 6) after buying some cute ballpoint pens, and at the end of the session, her mood score increased to happier (mood score = 7) because the session went smoothly without a hitch. In session 4, HN assessed that her mood was normal (mood score = 5) then increased by 2 points to be happier (mood score = 7). At the end of the session, HN felt optimistic that she could recover from depression. In session 5, HN's mood score before the session was slightly happy (mood score = 6). She had succeeded in buying the novel she had wanted since March and increased to be happier (mood score = 7) after the session was finished because she received support and positive words of encouragement from the researchers. In session 6, HN gave the score that the mood she was feeling was slightly happy (mood score = 6) because she had just woken up from a fairly deep sleep. At the end of the session, HN assessed her mood to be somewhat happier (mood score = 8) because she received encouragement from the researcher and had higher hopes for

recovery after undergoing six intervention sessions. In session 7, HN stated that she was in a bad mood and considered herself a little sad (mood score = 4) because of what happened the night before when she disagreed with her two sisters, who said they hated her. However, after finishing session 7, HN assessed that her mood had improved by 3 points to be happier (mood score = 7) because she had completed the session. HN admitted that her mood always improved after participating in the intervention program. In the last session of session 8, HN stated that she had no problems and her mood was a little happy (mood score = 6), and HN felt more optimistic and felt a better mood (mood score = 8) because she got motivational words from the researcher.

Discussion

The intervention using the Internet-based Cognitive Behavior Therapy (iCBT) approach by the Intervention Provider (IP) was given to HN once a week for eight weeks with an intervention duration of approximately sixty minutes. The intervention was given through WhatsApp Chat using the IP monitoring HN's mood conditions before and after the intervention, discussing HN's thoughts and feelings for one week during the IP and HN meeting breaks, IP guiding HN in completing the worksheets contained in the specially designed module, and HN writes a journal containing reflections and insights obtained from the intervention sessions that have been carried out. Programs and modules provided to HN refer to the research of Topooco et al. (2018), which focuses on a text/chat-based approach to adolescent clients who are depressed. Implementation of the intervention using the iCBT approach has also fulfilled three basic things that must exist, namely safe electronic media, appropriate treatment

programs, and guidance from clinicians (Lindfors & Andersson, 2016).

Based on the intervention results with the iCBT approach, it was found that depression symptoms experienced by HN were decreased before and after the intervention (pre-test = 41 (severe); post-test = 16 (mild)). A similar result with the post-test was also shown during the follow-up session (total score = 16), which indicated that HN could maintain mild depressive symptoms after intervention with the iCBT approach. These results supported Topooco et al. (2018) which showed a decrease in depressive symptoms experienced by adolescents who took part in the iCBT intervention, seen from a 30-50% decrease in the total BDI-II score from baseline to post-test. The decrease could be maintained until six months later when follow-up assessment with HN was conducted.

The symptoms of depression felt by HN improved after following the intervention with the iCBT approach. HN no longer feels depressed mood every day and begins to appear interested in the surrounding environment. This is shown from the items on the BDI-II Scale selected by HN at the post-test, which revealed that she no longer felt empty, no longer cried often, nor felt sad and guilty all the time. HN also feels that her physical condition is improving; she is starting to sleep well, not getting tired easily, no longer worrying about her health, and enjoying the activities she is doing. Although HN showed the same low level of depressive symptoms at the post-test and follow-up, the symptoms she complained of were different. At the follow-up, HN found it difficult to sleep, tired more easily, cried more often, and felt that she had experienced more failures than other people. However, HN also revealed that she could work better than usual, make decisions, and have more interest in interacting with other people. The iCBT intervention can reduce the

depressive symptoms felt by participants (Hadjistavropoulos et al., 2016; Newby et al., 2017) and can last up to twelve weeks after the intervention (Noguchi et al., 2017), and can improve the ability to manage stress in general, cognitive function, and life satisfaction of participants (Casey et al., 2017).

The intervention with the iCBT approach was also stated by HN that it helped her understand herself and her depressive disorder so that she could slowly change her mindset and attitude in dealing with problems. This understanding allows HN to accept her condition and helps HN to be more aware of her interrelated thoughts, feelings, and behaviors. With this understanding, HN tries to control her thoughts, feelings, or behavior to improve her depression gradually. For example, HN started attending family events that she always avoided and realized that feeling ostracized by her family was part of her automatic thought. This is in line with Gottlieb et al. (2017) research that the iCBT intervention helps participants better understand their problem so that participants have a better knowledge of themselves and their surrounding conditions and improve their social functioning.

Withdrawal attitude, a coping strategy for HN and the primary concern of problematic behavior shown by HN also began to improve after the intervention with the iCBT approach. Based on HN's confession, it was known that the presence of IP through short messages regularly once a week to ask how things were and provide interventions made HN begin to learn to be more open and trust others around her. Communication through short messages is favored by adolescents, especially girls, in the implementation of iCBT because it reduces anxiety in dealing directly with the therapist so that participants can be more open during intervention sessions and

create positive collaboration between participants and their therapists (Topooco et al., 2018). IP's attitude of accepting HN's depression and always supporting HN with positive words also increases HN's feelings of worth to try better in completing all tasks assigned by IP, which helps reduce depression symptoms experienced by HN. When the therapist emphasizes positive beliefs in participants, shows empathy, and supports participants to complete their tasks, participants will show a cooperative attitude during the intervention session and result in a higher task completion rate from participants (Kumar et al., 2017).

Based on the qualitative results of all the tasks completed by HN, it is known that HN also experienced a change in mindset to become more positive after following the intervention with the iCBT approach. In the intervention process, HN realized that she has core beliefs that she does not deserve to be loved because she always disappoints the people around her. HN also gains insight that most of her negative thoughts are not in line with the facts or what is often referred to as thinking errors. This change in mindset is reinforced through homework in session five about noting negative thoughts or feelings that arise and looking for supporting and opposing evidence that strengthens these thoughts or feelings. HN admitted that she tried the technique several times outside of the intervention task. This technique helps HN determine more appropriate behavioral responses even though she still has negative thoughts and feelings. In their research, James and Barton (2004) revealed that the technique of re-examining the beliefs held by intervention participants by comparing them objectively to facts and evidence regarding these beliefs could change participants' core beliefs.

The iCBT intervention effectively reduces depressive symptoms experienced by adolescents, especially if it has activity

components in the form of behavioral activation and cognitive restructuring (Oud et al., 2019). HN, who carried out these two activities for several sessions outlined in the intervention tasks, also tried to practice them daily. It influenced the change in HN's attitude to become more positive towards her social environment. For example, HN has started trying to share her feelings and thoughts with Mother when facing problems, instead of just being silent like her usual behavior. HN also realized that Father showed his concern for HN with his attitude and defended her when she disagreed with her two sisters. HN also wants to try to contact her friends first to talk about light things such as recommendations for exciting stories on Webtoon and Wattpad, exchanging messages again, and making plans for a reunion with her elementary school friends.

After completing all intervention sessions, HN revealed that HN's optimism and desire to recover from depression were getting stronger. HN has also shown courage and a desire to return to school. During the intervention, the school theme was one of the main problems. HN revealed that failing to enter the Islamic boarding school of her dreams, not being at the boarding school recommended by her parents, and one year not wanting to continue her education were the main burdens that constantly made her feel worthless and disappointed her parents. However, the intervention and learning techniques for finding solutions to problems, breaking challenging tasks into small and doable steps, and understanding negative automatic thoughts and dysfunctional schemas made HN aware that she had to stay in school and she needed to be brave enough to face her fears. HN said that she would certainly experience the same anxiety and fear if she went back to school, she might also have the desire to give up

halfway through. However, some of the materials and techniques she received during the intervention made her more optimistic that she could choose to keep fighting and come back to school.

In addition to the various results that support the program's effectiveness, some factors can be an obstacle for HN to maintain a low current state of depressive symptoms. The factor is the concern of HN's sisters who are still low about the condition of HN. HN's sisters do not care about HN's depression and still consider it an attempt by HN to seek attention from her parents. In addition, HN's sisters also often feel that their parents pamper HN too much and treat HN too much when HN complains about her physical condition. In addition, HN still lacks the confidence to control her own thoughts and feelings. HN still needs support from the people around her to convince her that she is a worthy person and has the strength to face her fears. Based on the meta-analysis study that has been done by Oud et al. (2019), it is known that the involvement of people closest to participants in the intervention has an effect on reducing depressive symptoms experienced by participants.

There are several limitations in our study on the implementation of the intervention with the iCBT approach. During the presentation of the program material, IP used language that was less straightforward and took a long time to compose explanatory sentences. In the module book given to participants, there are still some unclear instructions and a lack of examples of variations in answers. In the research methodology section, no instrument measures self-esteem that appears as part of HN's depressive symptoms.

Conclusion

Based on the description of the intervention results above, it can be concluded that the intervention program

with the iCBT approach effectively reduces depressive symptoms experienced by adolescent girls. The total score of the BDI-II Scale, originally 41 (severe) at the pre-test, can be reduced to 16 (mild) at the post-test. This also shows that providing interventions through online messaging app such as WhatsApp chat without any face-to-face meetings online or offline can also be effective and reduce symptoms of depression. Worksheets and homework assignments given to participants are essential keys for intervention with the iCBT approach.

The things that support the success of this program are the cooperative attitude of HN, practical techniques that can be done independently to control the thoughts, feelings, and behaviors of HN, HN's trust in the IP, and the optimistic feelings of HN to recover from depression. On the other hand, there are obstacles in implementing the intervention, namely the attitude of the two participating sisters who do not care about the condition of HN. Meanwhile, the limitation of this research is the implementation of intervention programs that are still focused on participants and have not involved the closest people, such as family.

Suggestion

Based on the limitations contained in this intervention, in the future, it is necessary to carry out interventions that can increase the awareness and involvement of people closest to participants, such as families. This is important to do because individuals who are depressed need support and help from the surrounding environment. In addition, further research or intervention needs to involve parents in supporting participant interventions, not just psychoeducation which still lacks impact on changing attitudes and parental support for

participants. In implementing future iCBT interventions, it is also necessary to design messages to be sent to modules with more concrete instructions and examples and other measurement instruments related to symptoms in participants.

References

- Andersson, G., Wagner, B., & Cuijpers, P. (2016). ICBT for depression. In *Guided Internet-based treatments in psychiatry* (pp. 17-32). Springer, Cham.
- Beck, J. S., & Beck, A. T. (2011). *Cognitive behavior therapy*. New York, NY: Basics and beyond. Guilford Publication.
- Beck, A. T., Steer, R. A., & Brown, G. (1996). Beck depression inventory–II. *Psychological Assessment*. <https://doi.org/10.1037/t00742-000>
- Bradley, K. L., Robinson, L. M., & Brannen, C. L. (2012). Adolescent help-seeking for psychological distress, depression, and anxiety using an internet program. *International Journal of Mental Health Promotion*, *14*(1), 23-34. <https://doi.org/10.1080/14623730.2012.665337>
- Casey, L. M., Oei, T. P., Raylu, N., Horrigan, K., Day, J., Ireland, M., & Clough, B. A. (2017). Internet-based delivery of cognitive behaviour therapy compared to monitoring, feedback and support for problem gambling: a randomized controlled trial. *Journal of gambling studies*, *33*(3), 993-1010. <https://doi.org/10.1007/s10899-016-9666-y>
- Finning, K., Ukoumunne, O. C., Ford, T., Danielsson-Waters, E., Shaw, L., De Jager, I. R., Stentiford, L., ... & Moore, D. A. (2019). The association between child and adolescent depression and poor attendance at school: A systematic review and meta-analysis. *Journal of Affective Disorders*, *245*, 928-938. <https://doi.org/10.1016/j.jad.2018.11.055>
- Gore, F. M., Bloem, P. J., Patton, G. C., Ferguson, J., Joseph, V., Coffey, C., ... & Mathers, C. D. (2011). Global burden of disease in young people aged 10–24 years: a systematic analysis. *The Lancet*, *377*(9783), 2093-2102. [https://doi.org/10.1016/S0140-6736\(11\)60512-6](https://doi.org/10.1016/S0140-6736(11)60512-6)
- Gottlieb, J. D., Gidugu, V., Maru, M., Tepper, M. C., Davis, M. J., Greenwold, J., ... & Mueser, K. T. (2017). Randomized controlled trial of an internet cognitive behavioral skills-based program for auditory hallucinations in persons with psychosis. *Psychiatric rehabilitation journal*, *40*(3), 283. <https://doi.org/10.1037/prj0000258>
- Hadjistavropoulos, H. D., Pugh, N. E., Hesser, H., & Andersson, G. (2016). Predicting response to therapist-assisted internet-delivered cognitive behavior therapy for depression or anxiety within an open dissemination trial. *Behavior therapy*, *47*(2), 155-165. <https://doi.org/10.1016/j.beth.2015.10.006>
- Jackson-Koku, G. (2016). Beck depression inventory. *Occupational Medicine*, *66*(2), 174-175. <https://doi.org/10.1093/occmed/kqv087>

- James, I. A., & Barton, S. (2004). Changing core beliefs with the continuum technique. *Behavioural and Cognitive Psychotherapy*, 32(4), 431. <https://doi.org/10.1017/S1352465804001614>
- Kemp, G. N., O'Connor, E. E., Kritikos, T. K., Curren, L., & Tompson, M. C. (2017). Treatment Strategies for Depression in Youth. In *Handbook of Childhood Psychopathology and Developmental Disabilities Treatment* (pp. 159-194). Springer, Cham.
- Kumar, V., Sattar, Y., Bseiso, A., Khan, S., & Rutkofsky, I. H. (2017). The effectiveness of internet-based cognitive behavioral therapy in treatment of psychiatric disorders. *Cureus*, 9(8). <https://doi.org/10.7759/cureus.1626>
- Lindfors, N., & Andersson, G. (Eds.). (2016). *Guided internet-based treatments in psychiatry*. Cham, Switzerland: Springer International Publishing.
- Mufson L., Dorta K. P., Moreau D., Weissman M. M., Mufson, L. (2004). *Interpersonal psychotherapy for depressed adolescents*. New York, NY: Guilford Press.
- Newby, J., Robins, L., Wilhelm, K., Smith, J., Fletcher, T., Gillis, I., ... & Andrews, G. (2017). Web-based cognitive behavior therapy for depression in people with diabetes mellitus: a randomized controlled trial. *Journal of medical Internet research*, 19(5), e157. <https://doi.org/10.2196/jmir.7274>
- Noguchi, R., Sekizawa, Y., So, M., Yamaguchi, S., & Shimizu, E. (2017). Effects of five-minute internet-based cognitive behavioral therapy and simplified emotion-focused mindfulness on depressive symptoms: a randomized controlled trial. *BMC psychiatry*, 17(1), 1-14. <https://doi.org/10.1186/s12888-017-1248-8>
- Oud, M., De Winter, L., Vermeulen-Smit, E., Bodden, D., Nauta, M., Stone, L., ... & Engels, R. (2019). Effectiveness of CBT for children and adolescents with depression: A systematic review and meta-regression analysis. *European Psychiatry*, 57, 33-45. <https://doi.org/10.1016/j.eurpsy.2018.12.008>
- Selph, S. S., & McDonagh, M. S. (2019). Depression in Children and Adolescents: Evaluation and Treatment. *American family physician*, 100(10), 609-617.
- Sindahl, T. N. (2011). *Chat Counselling for Children and Youth: A Handbook*. Copenhagen: Børns Vilkår.
- Stallard, P. (2019). *Think good, feel good: A cognitive behavioural therapy workbook for children and young people*. John Wiley & Sons.
- Topooco, N., Berg, M., Johansson, S., Liljethörn, L., Radvugin, E., Vlaescu, G., ... & Andersson, G. (2018). Chat-and internet-based cognitive-behavioural therapy in treatment of adolescent depression: randomized controlled trial. *BJPsych open*, 4(4), 199-207. <https://dx.doi.org/10.1192/bjo.2018.18>



Brand Authenticity as a Mediator of Relationship Between Self-Congruity and Consumer Loyalty

Susilo Hidayat¹, Farida Agus Setiawati²

¹ Department of Psychology, Faculty of Education, Universitas Negeri Yogyakarta

Jl. Colombo No. 1 Sleman Yogyakarta, 55281.

¹ hidayatsusilo123@gmail.com; ² farida_as@uny.ac.id

Abstract

This study investigates the effect of brand authenticity as a mediator of self-congruity relationships on coffee shops consumer loyalty. Data obtained by cross-sectional method with convenience/accidental sampling through an online survey platform. Four hundred thirty responses (44.4% male) were collected from consumers of various brands of coffee shops located in DIY. The mediation effect hypothesis was tested using a bootstrapping approach and additional analysis of the causal step approach using the Sobel test. Self-congruity and brand authenticity have a positive effect on brand loyalty. There is a partial mediating effect produced by brand authenticity on the relationship between self-congruity and brand loyalty. Consumers' consideration to be loyal to the brand is not only based on the suitability of their self-concept with the brand image/brand users image (self-congruity), but also the brand's authenticity.

Keywords: *Brand authenticity, brand loyalty, self-congruity, and coffee shop*

Introduction

Indonesia is one of the four major coffee bean exporters globally, with a total production of 760.96 thousand tons in 2019 (Pusat Data dan Sistem Informasi Pertanian, 2020:41). The value of Indonesia's coffee exports is predicted to decline by an average of 0.41% every year, in line with the increase in domestic coffee consumption by 3.07% (Pusat Data dan Sistem Informasi Pertanian, 2020:57). This prediction refers to a 13.9% increase in domestic consumption of coffee commodities, from 250 thousand tons in 2018 to 294 thousand tons in 2020. This shows the growth of the domestic coffee processing industry, which is directly proportional to the increasing trend of consumption of coffee products in the community.

Mix Marketing & Communication Magazine and Toffin (2019) confirmed the

increasing trend of coffee consumption in Indonesia in a research report published in 2020. The trend of coffee consumption is growing in terms of increasing the number of modern coffee shops/coffee shops. The number of coffee shops in Indonesia initially amounted to 1083 in 2016 (stores of various brands), then increased three times in 2019 to 2937 shops.

One of the areas experiencing a growing trend of coffee consumption is the province of Yogyakarta. At least 250 coffee shops from various brands run business activities in this province (the search entry results on the Traveloka Eats platform). In the official prospectus document of Bento Kopi (a coffee shop in DIY) on the Santara.co.id website, it was recorded that in 2018 there were around 1100 coffee shops throughout DIY (PT Muda Bangun Semesta, 2020). Quoting Agus Prasetyo, on

the bernas.id said that there were only 350 coffee shops in 2014, an increase of 600 in 2015, and finally 1000 in 2018 (Bernas.id, 2018). This is similar to Ranu Prasetyo, Marketing Communications Manager of Ralali.com and an expert on digital business in Indonesia. He stated that in 2017, the number of coffee shops in Yogyakarta and its surroundings reached 1200. This figure is much higher than the nearest big cities such as Semarang with 700 coffee shops and Solo with around 400 coffee shops (Selular.id, 2018).

The high growth of coffee shops raises classic problems in business competition. From the perspective of businesspeople, consumer loyalty to a brand is critical to ensure the sustainability of coffee shop business activities. Maintaining consumer loyalty to the brand is very important to strengthen the brand (Kotler & Keller, 2016). Brand loyalty occurs when consumers are satisfied with the quality of the product/service of a brand compared to other brands. Consumers consciously evaluate their behavior and repeat purchases at the same brand (Jacoby & Kyner, 1973).

Brand loyalty measures the extent to which consumers are committed to buying brands regularly (Schiffman & Wisenblit, 2019). Consumers' deeply held commitment to re-buy or re-subscribe to a preferred product or service consistently. However, situational influences and marketing efforts can cause behavioral switching (Oliver, 2010).

Quality and authentic products can increase consumer satisfaction and brand loyalty (Alhaddad, 2015; Andervazh et al., 2016; Hong-Youl Ha, 2012; Kassim et al., 2014). In the postmodern era, problems arise in terms of authenticity. These problems cause consumers to feel like they are in the middle of a market filled with various brands, especially coffee shop brands. Coffee shop brands compete and try to "grab the hearts" of potential consumers to buy the product. This creates

a condition of hyperreality (Baudrillard, 1995:3). The hyperreality condition makes it difficult for consumers to identify which brands are "authentic" and which brands are "fake" (Arnould & Price, 2000; Firat & Venkatesh, 1995). Fake is not interpreted as "imitation" or "imitation".

Consumer demand for authenticity is natural and inevitable. Authenticity is essential for consumers because it reduces the complexity of globalization, minimizes risk, advocates for loss of trust in brands, homogenization, and deals with brands with similar and ubiquitous products (Christine & Prinsloo, 2015). In addition, the critical attitude, cynicism, skepticism, and consumer distrust of the brand raises consumer resistance. Resistant consumers tend to be sensitive to authenticity and understand which brands are authentic (Christine & Prinsloo, 2015).

The coffee business competition has become a competition in the Red Ocean with the proliferation of new coffee shops. In the red ocean business competition, coffee brands are likened to a shark that pounces on each other (Kim & Mauborgne, 2015a). Business owners must be able to create new markets by offering innovative new values (Kim & Mauborgne, 2015b). Value innovation means that each store must show something truly authentic and unique to consumers to foster brand loyalty.

Morhart, Malär, Guèvremont, Girardin, & Grohmann (2015) state that an authentic brand is a brand that is consistent and able to last over time (continuous), loyal to consumers (credible), has care and responsibility (integrity) and can support consumers, to be honest with themselves/express themselves (symbolism). Authenticity is a precious asset for brands (Kotler et al., 2017), especially for brands that want to be "survive" and "sustainable".

Apart from authenticity, consumers generally tend to be more attached to products, services, and brands that express essential aspects of themselves, such as self-

identity, values, and goals (Aguirre-Rodriguez et al., 2012). Active consumers choose products from brands according to their tastes or preferences. Consumers are sometimes faced with several choices of brands that have equally strong product quality and authenticity. Although product quality and authenticity are equivalent, consumers will be reluctant to buy and subscribe to a brand if they are not "tasteful" or "not suitable". Therefore, in addition to brand authenticity, consumer loyalty to the brand can also be determined from how "fit" a brand is with one's self-concept (self congruity) (Kang, Tang, & Lee, 2015; Shamah, Mason, & Moretti, 2018).

Self-congruity is a process as well as a psychological outcome that occurs when consumers compare their perceptions of brand image (brand personality or brand user image) with their self-concept (actual self, ideal self, social self) (Sirgy, 2018).

Methods

This study is quantitative, ex-post-facto research. This study tries to ascertain or establish relationships between at least two aspects of the problem/phenomenon in research, and sometimes, to replicate these relationships to strengthen their reliability and validity (Hackett, 2018).

Research Subjects

The minimum number of samples for this research is 385-400 subjects. We obtained 430 responses (44.4% male) from consumers of various brands of coffee shops located in Yogyakarta.

Research Instruments

This study uses primary data obtained from the process of measuring research variables on consumers using a psychological scale that is distributed online. The scale used is Perceived Brand Authenticity (7 points Likert) adapted from Morhart et al. (2015). The Brand Loyalty

Scale (7 Likert Points) was adapted from Kang et al. (2015), and the self-congruity scale (5 points Likert) was adapted from Sirgy & Su (2000) and Kang et al. (2015). Data was obtained through the accidental sampling method.

Data Analysis

Hypothesis testing was carried out using a bootstrapping approach (Hayes, 2018) and additional analysis of the causal step with the Sobel test as suggested by Baron & Kenny (1986). This study applies a simple mediation model because it only involves one mediator variable. In addition, multiple regression analysis was conducted to determine the effect of each independent variable outside the framework of mediation analysis.

Findings

Descriptive analysis of the scores of each research variable is shown in the diagram below:

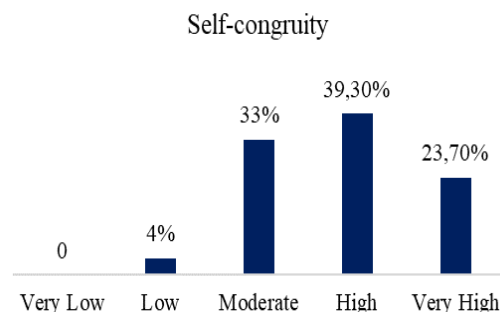


Figure 1. Self-congruity Frequency Distribution

Self-congruity scores in the low category are 4% of 430 total subjects, moderate category 33% of 430 total subjects, high category 39.3% of 430 total subjects, and the very high category 23.7% of 430 total subjects.

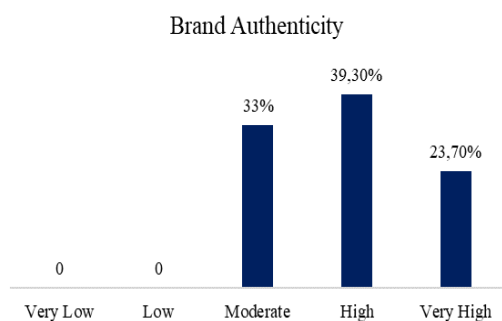


Figure 2. Brand Authenticity Frequency Distribution

Then the Perceived Brand Authenticity scores in the moderate category are 33% of 430 total subjects, high category 39.3% of 430 total subjects, and the very high at 23.7% of 430 total subjects.



Figure 3. Brand Loyalty Frequency Distribution Diagram

On brand loyalty, the scores in the moderate category are 39.1% of 168 subjects. Then in the high score category, the percentage was 34.2% from 147 subjects, and the very high category was 26.7% from 115 subjects.

The results of the multiple regression analysis tests showed that self-congruity has a positive effect on brand

loyalty ($\beta = 0.1990$, $t(429) = 4.999$, $p < 0.0$). Meanwhile, brand authenticity also has a positive effect on brand loyalty ($\beta = 0.6003$, $t(429) = 15.077$, $p < 0.05$).

From the results of the regression test, a multiple regression equation can be formulated:

$$Y = 3,985 + 0,199X_1 + 0,600X_2$$

The results of further calculations show that the effective contribution (SE) of the self-congruity and brand authenticity variables to brand loyalty is 53.3%. With an effective contribution value of 10.6% for self-congruity and 42.7% for brand authenticity. The value of 53.3% can be interpreted that the variance of brand loyalty scores can be effectively explained by the two independent variables of 53.3%. Meanwhile, the remaining 46.7% is explained by other variables not involved in this study.

Sobel test produces a t value of 3.332. This value is greater than the t -table value of this study, which is 1.648 (one-tailed, $p = 0.05$). It can be concluded that the brand authenticity variable can act as a mediator of the relationship between self-congruity and brand loyalty because it has a t -count value of $3.3322 > t$ -table 1.648.

Hypothesis testing using a bootstrapping approach was carried out to find out how the mediating effect of the brand authenticity variable on the self-congruity relationship on brand loyalty was carried out. The test was carried out using the PROCESS 3.5 plug-in on SPSS. The results of the mediation analysis are shown in table 1. The regression coefficients listed in table 1 can be manifested in a model diagram in Figure 4.

Table 1. Mediation Test Results

Independent	Dependent							
	M (Authenticity)			Y (Loyalty)				
	Coeff.	SE	<i>p</i>	Coeff.	SE	<i>p</i>		
X (<i>Self-congruity</i>)	<i>a</i>	.5568	.1661	< .001	<i>c'</i>	.1990	.1171	< .001
M (Authenticity)	-	-	-	-	<i>b</i>	.6003	.0283	< .001
constant	<i>i_M</i>	47,28	2,047	< .001	<i>i_Y</i>	3,985	1,903	< .001
			R ² = ,3100					
			F = 192,2953, <i>p</i> < .001					
					R ² = ,5330			
							F = 243,6620, <i>p</i> < .001	

Figure 4. Path plot of mediation test

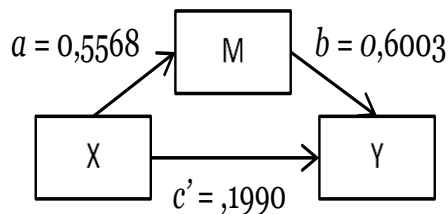


Table 1. Mediation Percentage

Effect	Label	Coeff.	%
<i>Indirect</i>	<i>a × b</i>	.3342	62.7
<i>Direct</i>	<i>c'</i>	.1990	37.3
Total	<i>c' + a × b</i>	.5333	100.0

From the results of the analysis, it is known that the percentage value of the indirect effect (62.7%, = 0.3342, *p* < 0.05) is greater than the direct effect (37.3%, = 0.1990, *p* < 0.05) .

Discussion

Consumers sometimes consume something according to their self-concept (Malhotra, 1988). Self-concept is an individual's awareness of experience, existence, perspective, and attitude towards himself. In addition, consumers also tend to be more attached to products, services, and brands that express essential aspects of themselves, such as self-

identity, values, and life goals (goals) (Aguirre-Rodriguez et al., 2012). Brand image and brand user image have a close relationship with self-concept. When the consumer's self-concept is in accordance with the impression/image of the brand or brand users (shop visitors), it can be said that self-congruity occurs.

This study states that self-congruity has a significant effect on brand loyalty. It can be said that the more appropriate the consumer's self-concept with the brand image or brand user image, the higher the consumer's tendency to foster loyalty.

In addition to product conformity with self-concept (self-congruity),

consumers want quality products that meet their needs and are authentic. Consumer demand for authenticity is natural and inevitable. Authenticity is essential for consumers because it reduces the complexity of globalization, minimizes risk, advocates for loss of trust in brands, homogenization, and deals with brands with similar and ubiquitous products (Christine & Prinsloo, 2015). In addition, the critical attitude, cynicism, skepticism, and consumer distrust of the brand raises consumer resistance. Resistant consumers tend to be sensitive to authenticity and understand which brands are authentic (Christine & Prinsloo, 2015).

The analysis results show that the authenticity perceived by consumers of the brand significantly affects brand loyalty. The higher the consumer's perception of the authenticity of a brand, the more loyalty will grow. This can happen because the authentic brand consumers get guaranteed products and excellent service. Brands that can survive for a long time have high credibility and integrity and support consumers to be themselves make consumers believe so that the possibility of consumers being loyal is high.

The results of the mediation test can be interpreted that consumers will experience a more substantial self-congruity effect if the brand is perceived as authentic. Authentic brands guarantee consumers good product quality, thus enabling the growth of brand loyalty. Authentic brands become a platform for consumers to develop brand trust, which can later be developed into loyalty. Consumers choose authentic brands that can be used to express important aspects of themselves, such as self-identity, values, and goals (Aguirre-Rodriguez et al., 2012). In the end, consumers will be loyal to brands that are reliable and entirely responsible for customer satisfaction and in accordance with the self-concept of consumers.

Conclusion

Based on the research that has been carried out, it can be concluded that self-congruity and brand authenticity positively affect brand loyalty. The results of the mediation test explain that brands that are seen as authentic by consumers will tend to produce a more substantial self-congruity effect. This can be interpreted that authenticity has a crucial role in the consumer's decision to be loyal or not, associated with whether or not the consumer's self-concept is appropriate with the brand personality and/or brand user image.

Suggestion

Authenticity and self-congruity can be effective predictors to determine consumer loyalty to the brand. For brands, authenticity must be developed or highlighted to increase consumer loyalty. In addition, the effect of self-congruity must also be developed by setting clear targets and market segmentation (niche marketing).

References

- Aguirre-Rodriguez, A., Bosnjak, M., & Sirgy, M. J. (2012). Moderators of the self-congruity effect on consumer decision-making: A meta-analysis. *Journal of Business Research*, 65(8), 1179–1188. <https://doi.org/10.1016/j.jbusres.2011.07.031>
- Alhaddad, A. (2015). Perceived quality, brand image and brand trust as determinants of brand loyalty. *Journal of Research in Business and Management*, 3(4), 01–08. https://www.researchgate.net/profile/Abdullah_Alhaddad2/post/Can_you_suggest_me_some_good_literature_reviews_on_brand_loyalty_and_other_papers_that_are_focused

- [_on_millennials_attitude_to_be_loyal_to_brands/attachment/5a1d118b4cde267c3e6f336f/AS%3A56557281](#)
- Andervazh, L., Shohani, M., Tamimi, H., Diyaleh, P., & Alnasere, S. (2016). The Effects of brand perceived quality and awareness on brand loyalty (Case Study: Carbonated drinks). *International Journal of Advanced Biotechnology and Research (IJBR)*, 7, 202–209. <http://www.bipublication.com>
- Arnould, E., & Price, L. (2000). Authenticating acts and authoritative performances. In S. Ratneshwar, D. G. Mick, & C. Huffman (Ed.), *The Why of Consumption: Contemporary Perspectives on Consumers' Motives, Goals, and Desires* (hal. 138). Routledge.
- Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51(6), 1173–1182. <https://doi.org/10.1037/0022-3514.51.6.1173>
- Baudrillard, J. (1995). *Simulacra and Simulation*. University of Michigan Press.
- Bernas.id. (2018). Bisnis Warung Kopi Di Yogyakarta Cukup Menjanjikan. In *Bernas.id*. <https://www.bernas.id/63451-bisnis-warung-kopi-di-yogyakarta-cukup-menjanjikan>
- Christine, M., & Prinsloo, M. (2015). Authenticity in marketing: a response to consumer resistance? *Journal of Marketing and Consumer Behaviour in Emerging Markets*, 2015(2), 15–32. <https://doi.org/10.7172/2449-6634.jmcbem.2015.2.2>
- Firat, A. F., & Venkatesh, A. (1995). Liberatory postmodernism and the reenchantment of consumption. *Journal of Consumer Research*, 22(3), 239. <https://doi.org/10.1086/209448>
- Hackett, P. M. W. (2018). *Quantitative Research Methods in Consumer Psychology*. Routledge. <https://doi.org/10.4324/9781315641577>
- Hayes, A. F. (2018). *Introduction to Mediation, Moderation, and Conditional Process Analysis: A Regression-Based Approach* (2 ed.). The Guildford Press.
- Hong-Youl Ha. (2012). Effects of perceived quality and satisfaction on brand loyalty in China: The moderating effect of customer orientation. *African Journal of Business Management*, 6(22), 6745–6753. <https://doi.org/10.5897/AJBM12.236>
- Jacoby, J., & Kyner, D. B. (1973). Brand loyalty vs. repeat purchasing behavior. *Journal of Marketing Research*, 10(1), 1. <https://doi.org/10.2307/3149402>
- Kang, J., Tang, L., & Lee, J. Y. (2015). Self-congruity and functional congruity in brand loyalty. *Journal of Hospitality and Tourism Research*, 39(1), 105–131. <https://doi.org/10.1177/1096348012471377>
- Kassim, A. W. M., Igau, O. a., Harun, A., & Tahajuddin, S. (2014). Mediating effect of customer satisfaction on perceived product quality, perceived value, and their relation to brand loyalty. *International Journal of Research in Management & Business Studies (IJRMBS)*, 1(2).

- Kim, W. C., & Mauborgne, R. (2015a). Red Ocean Traps. The mental models that undermine market-creating strategies. *Harvard Business Review*, 68–74. <http://www.aurovikas.co.in/os2019/upload1/resources/RedOceanTraps.pdf>
- Kim, W. C., & Mauborgne, R. A. (2015b). *Blue Ocean Strategy (Expanded Edition): How to Create Uncontested Market Space and Make the Competition Irrelevant (Expanded)*. Harvard Business Review Press.
- Kotler, P., Kartajaya, H., & Setiawan, I. (2017). *Marketing 4.0: Moving from Traditional to Digital*. John Wiley & Sons.
- Kotler, P., & Keller, K. L. (2016). *Marketing Management* (15 ed.). Pearson.
- Malhotra, N. K. (1988). Self-concept and product choice: An integrated perspective. *Journal of Economic Psychology*, 9(1), 1–28. [https://doi.org/10.1016/0167-4870\(88\)90029-3](https://doi.org/10.1016/0167-4870(88)90029-3)
- Morhart, F., Malär, L., Guèvremont, A., Girardin, F., & Grohmann, B. (2015). Brand authenticity: An integrative framework and measurement scale. *Journal of Consumer Psychology*, 25(2), 200–218. <https://doi.org/10.1016/j.jcps.2014.11.006>
- Oliver, R. L. (2010). *Satisfaction: A behavioral perspective on consumer* (2 ed.). Routledge.
- PT Muda Bangun Semesta. (2020). *Prospektus BENTO KOPI*. https://www.santara.co.id/uploads/token/BNTO_prospektus.pdf
- Pusat Data dan Sistem Informasi Pertanian Sekretariat Jenderal Kementerian Pertanian Republik Indonesia. (2020). *Buku Outlook Komoditas Perkebunan Kopi Tahun 2020*. <http://epublikasi.setjen.pertanian.go.id/>
- Schiffman, L. G., & Wisenblit, J. (2019). *Consumer Behavior* (12 ed.). Pearson. <https://doi.org/10.1088/1751-8113/44/8/085201>
- Selular.id. (2018). Ralali Tangkap Peluang Bisnis Kedai Kopi di Yogyakarta. In *Selular.ID*. <https://selular.id/2018/03/ralali-tangkap-peluang-bisnis-kedai-kopi-di-yogyakarta/>
- Shamah, R. A. M., Mason, M. C., Moretti, A., & Raggiotto, F. (2018). Investigating the antecedents of African fast-food customers' loyalty: A self-congruity perspective. *Journal of Business Research*, 86(October 2016), 446–456. <https://doi.org/10.1016/j.jbusres.2017.05.020>
- Sirgy, M. J. (2018). Self-congruity theory in consumer behavior: A little history. *Journal of Global Scholars of Marketing Science*, 28(2), 197–207. <https://doi.org/10.1080/21639159.2018.1436981>
- Sirgy, M. J., & Su, C. (2000). Destination image, self-congruity, and travel behavior: Toward an integrative model. *Journal of Travel Research*, 38(4), 340–352. <https://doi.org/10.1177/004728750003800402>
- Toffin, & Majalah MIX. (2019). *2020 Brewing in Indonesia: Insights for Successful Coffee Shop Business*.



Career Adaptability and Work Engagement of Millennial Startup Employees

Novia Haryani ¹

¹ Department of Psychology, Faculty of Education, Universitas Negeri Yogyakarta,
Jl. Colombo No. 1 Karangmalang Depok Sleman Daerah Istimewa Yogyakarta 55281

¹ noviaharyani75@gmail.com

Abstract

This study aims to determine the level of career adaptability and work engagement and the effect of career adaptability on work engagement in millennial generation employees at a startup company. This type of research is ex post facto with a quantitative approach. The population of this study amounted to 34 employees who work at the startup company. This research is a population study; therefore, it uses the entire population of employees. The instrument uses a psychological scale of career adaptability and works engagement. The validity of the research scale uses content validity by expert judgment. The reliability of the research scale was estimated using Cronbach Alpha and composite reliability. The results of the descriptive analysis show that the level of career adaptability and work engagement of millennial generation employees at A startup company is relatively high. The results of multiple linear regression analysis show that: (1) career adaptability affects work engagement, (2) career adaptability concerns and curiosity dimensions affect work engagement, (3) career adaptability dimensions control and confidence have no effect on work engagement.

Keywords: *career adaptability, work engagement, the millennial generation*

Introduction

The industrial revolution 4.0 is a great force that utilizes information and communication technology to give birth to digital-based businesses such as startup companies (Tazkiyyaturrohman, 2020). The development of startups in Indonesia is relatively rapid. Judging by the Startup ranking research (2020), Indonesia ranks fifth globally with 2,206 startups. However, the rapid development of startups is comparable to the startup failure rate, which reaches 90% worldwide (Perdani, Widyanan & Santoso, 2018). One of the factors that cause startup failure is the human resource factor. Therefore, competent human resources are needed to ensure good company performance (Yanuar & Sulin, 2019).

Based on this, Bakker and Leiter (2010) suggest that individuals who can show the best performance in their work have a high level of work engagement. Work engagement is a positive and satisfying state, such as states related to self-esteem, strong motivation to do work, and strong feelings to be involved and connected to work (Schaufeli & Bakker, 2010).

Schaufeli and Bakker (2010:13) state that it can be seen from three aspects, namely vigor, dedication, and absorption, in determining work engagement. Vigor is a high level of willingness to devote energy to the work received, coupled with mental resilience to survive despite getting a difficult job. Dedication is an aspect that can be seen when individuals feel very

involved in work, have high enthusiasm, are inspired, feel proud of their work, and like to take challenges. Absorption is an aspect in which individuals feel the time is running very fast at work because they are dissolved in their work and have a mindset that can increase total concentration in their work.

Employees with high work engagement can achieve their work goals and organizational goals, and work success. In contrast, employees with low work engagement have a high turnover rate, bad customer treatment, and a lack of innovative ideas (Adi & Indrawati, 2019; Bakker & Leiter, 2010). Employees known to experience high turnover intentions and have low engagement are employees of the millennial generation. Millennial generation employees were born from 1985-2000 and were shaped by the technological revolution (Howe & Strauss, 2000; Othman et al., 2018). According to a survey from Dale Carnegie Indonesia (2017), only 25% of millennial employees are engaged, and the rest are disengaged. As many as 76.7% of millennial generation employees only last 1-2 years in their workplace and prefer "jumping bugs". These problems can be suppressed if they have good work engagement.

Two factors influence work engagement, namely job resources and personal resources (Bakker, 2011). Job resources refer to work's physical, social, and organizational aspects to reduce job demands, physiological and psychological costs, achieve work goals, and stimulate growth, learning, and personal development. Personal resources refer to individuals' feelings about their ability to control and impact their work environment. This allows individuals to adapt to changing working conditions. The individual's ability to control and adapt to the work environment refers to the concept of career adaptability.

Career adaptability is defined as the individual's readiness to cope with tasks to

prepare for and participate in work roles and adapt to unexpected situations due to changes in work and working conditions (Savickas, 1997). There are four dimensions of career adaptability, which include concern, control, curiosity, and confidence. Concern refers to how an individual is future-oriented and prepares for upcoming career tasks or challenges. Control refers to the responsibility of individuals in shaping themselves and their environment to fulfill what may happen next using self-discipline, effort, and persistence. Curiosity refers to a high curiosity in individuals to think about their abilities in various roles or learn more about jobs that interest them. Then, the confidence dimension refers to the ability and belief of individuals in building self-confidence to actualize their choices which can then be applied to life (Savickas & Porfeli, 2012).

Millennial generation employees must have good career adaptability skills because they must prepare for their professional and personal growth to integrate into the global world through new learning models such as adaptability (Othman et al., 2018). In addition, the millennial generation dominates the current workforce.

Considering that millennial generation employees are known as "jump bugs", have high turnover intentions, and have low engagement, it is a threat to the company. However, there is an interesting phenomenon in a particular startup company. Even though most employees at the startup are millennials, the employees can work well and show high spirits. The CEO said that some of the employees seemed enthusiastic about their work to complete it quickly. The startup also received investment from other startup companies. The company's success in getting this investment is also inseparable from the performance of employees who are seen as good by investors. This also impacts the extension of the cooperation

contract between the client and the company. It is proven that the role of employees as a human resource factor is vital for the company.

The excellent performance of the startup company employees has enabled the company to survive and even recruit new employees for its startup. In addition, companies can open successful boot camps. This is indeed inseparable from the role of employees who participate in helping in developing a boot camp and providing benefits and the company's success in developing one of its business divisions.

This research is necessary to conduct because it looks at the behavior of employees from the millennial generation related to work engagement by looking at personal resource factors such as career adaptability to see how ready they are to face rapid changes in the current 4.0 era industry related to work or unexpected conditions.

The primary hypothesis of this study propose that there is an effect of career adaptability on work engagement. The minor hypothesis proposes that each dimension of career adaptability (concern, control, curiosity, confidence) affects work engagement.

This study is presented to examine the level of work engagement and career adaptability of employees and the effect of career adaptability on the work engagement of millennial generation employees. In addition, to provide advice to companies to improve career adaptability so that employee work engagement can also increase to reduce problems faced by the company.

Methods

This research uses ex-post facto research. Ex-post facto research is causal-comparative research, in which data are collected after all the events of interest have occurred. In an ex-post-facto research, the researchers select one or more dependent

variables and examine the data by going back through time, looking for cause-and-effect relationships, without any treatment and intervention (Azwar, 2018: 10).

This study uses a quantitative approach. The quantitative approach emphasizes the analysis of numerical or numerical data that is processed using statistical methods. All the variables involved must be clearly and measurable (Azwar, 2016: 5).

Research Subjects

The population of this study is all millennial generation employees, both male and female, who work in a startup company as many as 34 employees. This research is a population study that involves all subjects and studies all subjects directly because the research subject is limited (Azwar 2018: 42).

Instruments

The procedure carried out in this study is to see the phenomena that often occur in employees at work by comparing the phenomena in the industry/organization where the research is conducted. Furthermore, data collection was carried out by distributing online questionnaires using google forms through social media to obtain quantitative research data.

The data collection technique used in this study uses a psychological scale in a Likert scale consisting of four statements, namely, Very Disappointing, scored 1, to Very Appropriate, scored 4. The term "appropriate" is used to indicate the subject's response because it is considered more relevant in the study. It measured the state of the subject with two variations, namely favorable items and unfavorable items. On favorable items, the value moves from 1-4, while on unfavorable items, the value moves from 4-1.

The work engagement scale used is a modified measurement tool from Titi's UWES (Utrecht Work Engagement Scale).

The career adaptability scale used is a measuring tool compiled by researchers that refers to aspects of career adaptability according to Savickas (1997) and Savickas and Profeli (2012, 2011).

After item selection, the number of work engagement scale items is 20 items (17 favorable items and three unfavorable items), and the number of career adaptability scales after item selection is 21 items (14 favorable items and seven unfavorable items).

Data Analysis

The data analysis technique used is descriptive analysis to determine the categories of employee work engagement and career adaptability levels and hypothesis testing using multiple linear regression analysis. Hypothesis testing in this study was not tested for classical assumptions because this research is a population study.

Findings & Discussion

The data of this study were obtained from 34 research subjects.

Table 1. Categorization of Work

Category	Interval	f	%
Very high	$X > 65$	11	32%
High	$55 < X \leq 65$	16	47%
Moderate	$45 < X \leq 55$	5	15%
Low	$40 < X \leq 45$	1	2,9%
Very low	$X \leq 40$	1	2,9%
Total		34	100%

Based on the table, it is known that most employees have a high level of work engagement with a percentage of around 47% and a total of 16 employees. Employees with high work engagement tend to have high morale and participate actively in work to achieve work goals, organizational goals and work success (Bakker & Leiter, 2010). The results of the

work engagement category are high because the company implements a pleasant work environment, and there is support from superiors and co-workers so that they can play the role of extrinsic motivation as a predictor of work engagement (Bakker, 2011).

Table 2. Categorization of Career Adaptability Data

Category	Interval	f	%
Very high	$X > 68,25$	12	35%
High	$57,5 < X \leq 68,25$	14	41%
Moderate	$47,25 < X \leq 57,5$	8	24%
Low	$36,75 < X \leq 47,25$	0	0%
Very low	$X \leq 36,75$	0	0%
Total		34	100%

Based on the table, it is known that most employees have a high level of career adaptability with a percentage of around 41% and a total of 14 employees. Employees with high career adaptability become more adaptable, pay more attention to the future of their work, can control themselves, have high curiosity, and strengthen the self-confidence to pursue what they want (Savickas & Porfeli, 2012). The results of the career adaptability level can be because many employees take part in mentoring programs developed by companies that can help employees develop their abilities. This is related to the learning environment that can affect career adaptability because the situation in the learning environment can equip individuals to learn according to their career goals (Super & Thompson 1984 in Patton & Lokan 2001).

Table 3. Categorization of Career Adaptability Dimension Data

Career Adaptability Dimension	Category	f	%
<i>Concern</i>	Moderate	14	41%
<i>Control</i>	Moderate	16	47%
<i>Curiosity</i>	High	12	35%
<i>Confidence</i>	Moderate	16	47%

Based on the categorization results above, it is concluded that the employee curiosity dimension is more dominant than the other dimensions in the career adaptability variable. Employees with high curiosity tend to be more realistic in their work-life because they can reflect on the suitability between themselves and the world of work, are interested in trying new things, and explore their careers (Savickas & Porfeli, 2011). The curiosity category of employees is high because the majority of employees have a high level of education. This is in line with the research of Bocciardi et al. (2017), who found that curiosity was one of the dimensions most influenced by the level of education. The level of education contributes to effectively identifying relevant goals in one's future.

Based on multiple linear regression analysis, it is known that the correlation coefficient (R) is 0.794, which indicates the career adaptability variable has a strong relationship with work engagement. The coefficient of determination (R Square) is 0.630, which shows that 63% of career adaptability affects the work engagement variable, and other variables influence the remaining 37%. The effect of career adaptability (simultaneously) on work engagement is quite strong. The categorization results show that employees have high career adaptability, so the behaviors of high career adaptability show positive behavior to support employee performance. Therefore, the career adaptability of employees will affect

employee work engagement in the company.

The concern dimension regression analysis results show the beta coefficient value of 0.718, the t-count value of 4.914, and the effective contribution of 53.6%. The effect of concern on work engagement is quite strong. This is because most employees care about their careers, prepare for their careers, and develop their careers according to their wishes. Therefore, employees who pay more attention to their work and career will show high engagement with their work and organization or company.

The control dimension regression analysis results show the beta coefficient value of -0.003, the t-count value of -0.015, and the effective contribution of -0.1%. The effect of control on work engagement is very low or has no effect. This happens because of changing working conditions so that employees are in a state of control. Under control, conditions can make employees impulsive in deciding everything, including work (Marsela & Supriatna, 2019). Moreover, the work system is often carried out remotely, or WFH does not rule out the possibility that employees often use working hours to do their personal affairs. This behavior can cause employees to procrastinate and ignore good performance as one of the impacts of high work engagement.

The curiosity dimension regression analysis results showed that the beta coefficient was 0.318, the t-count value was 2.332, and the practical contribution was 17.2%. The effect of curiosity on work engagement is low. This is because some employees work not according to their expertise or the majors they took before. This makes employees less able to reflect on the suitability between themselves and their work so that the effect on work engagement is low.

The regression analysis results of the confidence dimension show the beta

coefficient value of -0.184, the t-count value of -0.938, and the effective contribution of -7.7%. The effect of confidence on work engagement is very low or has no effect. This is related to the type of employee work that is not similar to their educational background, causing difficulties in facing challenges and overcoming obstacles in their work. Most of the employees who work not according to their abilities or majors are a contract and outsourced employees. Amalia & Hadi (2019) stated that contract and outsourcing employees tend to pay less attention to their career growth because they work only to seek experience and financial gain without considering work engagement. This discrepancy with employees' educational background and status makes employees not have high confidence, so it does not affect their work engagement.

Conclusion

The level of work engagement and career adaptability of the millennial generation employees at A startup company is relatively high. We found an effect of career adaptability on the work engagement of millennial generation employees at a startup company, especially on the dimensions of concern and curiosity. There is no partial influence of the dimensions of control and confidence on work engagement.

References

- Adi, P.R.P. & Indrawati, K.R. (2019). Perbedaan keterikatan kerja berdasarkan generasi kerja karyawan pada perusahaan berkonsep THK ditinjau dari etos kerja. *Jurnal Psikologi Udayana*, e-ISSN: 2654 4024; p-ISSN: 2354 5607, 46-57.
- Amalia, R.S. & Hadi, C. (2019). Pengaruh *work design characteristics*, *career growth*, dan *psychological capital* terhadap *work engagement* karyawan generasi milenial di PT. XYZ. *Jurnal Psikologi*, 15 (1), 10-24.
- Azwar, S. (2016). *Metode penelitian*. Yogyakarta: Pustaka Pelajar.
- Azwar, S. (2018). *Metode penelitian psikologi (Edisi II)*. Yogyakarta: Pustaka Pelajar.
- Bakker, A.B. (2011). An evidence-based model of *work engagement*. *Current Directions in Psychological Science*, 20(4), 265–269
- Bakker, A.B., & Leiter, M.P. (2010). *Work engagement a handbook of essential theory and research*. New York: Psychology Press, 1-20.
- Bocciardi, F., Caputo, A., Fregonese, C., et al. (2017). *Career adaptability* as a strategic competence for career development. *European Journal of Training and Development*, 41(1), 67–82. doi:10.1108/EJTD-07-2016-0049
- Dale Carnegie Indonesia. (2017). *Dale Carnegie Indonesia: kaum millennial tidak total bekerja*. Accessed on 14 February 2021 dari <https://www.dalecarnegie.id/sumberdaya/media/media-coverage/dale-carnegie-indonesia-kaum-millennial-tidak-total-bekerja/>
- Howe, N., & Strauss, W. (2000). *Millennials rising: the next great generation*. New York, NY: Vintage Books.
- Marsela, R.D. & Supriatna, M. (2019). Kontrol diri: definisi dan faktor. *Journal of Innovative Counseling : Theori, Prvaticce & Research*, 3 (2), 65-69.

- Othman, R., Kamal, N.M., Alias, N.E., et al. (2018). Positive psychological traits and *career adaptability* among millennials. *International Journal of Academic Research in Business and Social Sciences*, 8(9), 1420–1433.
- Patton, W. & Lokan, J. (2001). Perspectives on Donald Super's construct of career maturity. *International Journal for Educational and Vocational Guidance*, 1:31-48.
- Perdani, M.D.K., Widyawan, S. & Paulus, I. (2018). Faktor-faktor yang mempengaruhi pertumbuhan *startup* di Yogyakarta. *Seminar Nasional Teknologi Informasi dan Komunikasi 2018 (SENTIKA 2018) tanggal 23-24 Maret 2018*. Yogyakarta. ISSN: 2089-9815.
- Savickas, M.L. (1997). *Career adaptability*: an integrative construct for life-span, life-space theory. *The Career Development Quarterly*, 45(3), 247–259. doi:10.1002/j.2161-0045.1997.tb00469.x
- Savickas, M. L., & Porfeli, E. J. (2011). Revision of the career maturity inventory: The adaptability form. *Journal of Career Assessment*, 19(4), 355–374.
<https://doi.org/10.1177/1069072711409342>
- Savickas, M. L., & Porfeli, E. J. (2012). Career Adapt-Abilities Scale: Construction, reliability, and measurement equivalence across 13 countries. *Journal of Vocational Behavior*, 80(3), 661–673.
<https://doi.org/10.1016/j.jvb.2012.01.011>
- Schaufeli, W.B., & Bakker, A.B. (2010). *Defining and measuring work engagement: Bringing clarity to the concept*. 10–24
- Startup Ranking. (2020). *Startup ranking countries*. Accessed on 12 February 2021 dari <https://www.startupranking.com/countries>
- Tazkiyyaturrohmah, R. (2020). Tren model bisnis kolaborasi antar perusahaan *startup* perspektif bisnis islam. *Jurnal Penelitian Islam*, 14(2), 1-15.
- Titien. (2016). Penyusunan dan Pengembangan Alat Ukur Employee Engagement. *PSIKOHUMANIORA: Jurnal Penelitian Psikologi*, 1(1),113-130.
- Yanuar & Sulin. (2019). Efek mediasi *work engagement* dalam pengaruh job characteristic dan perceived organizational support terhadap employee performance di bidang it pada perusahaan *startup*. *Jurnal Manajemen Bisnis dan Kewirausahaan*, 3 (4), 94-102.

Subject Index

academic flow, 1, 2, 3, 4, 5
academic self-efficacy, 1
adolescent, 19, 20, 30, 32, 33, 34
Brand authenticity, 35
brand loyalty, 35, 36, 38, 39, 40, 41
career adaptability, 43, 44, 45, 46, 47, 48
coffee shop, 35, 36
COVID-19, 9, 10, 11, 12, 13, 17, 18, 20
depression, 19, 20, 21, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34
Internet-based Cognitive Behavior Therapy; iCBT, 19, 20, 29
marital quality, 9
millennial, 43, 44, 45, 48
online learning, 1, 2, 3, 4, 5
pandemic, 2, 4, 9, 10, 11, 13, 14, 15, 20
self-congruity, 35, 37, 38, 39, 40, 42
stress, 2, 9, 10, 11, 12, 13, 14, 15, 16, 30
work engagement, 43, 44, 45, 46, 47, 48, 49

