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Differences in Early Adult Anxiety during COVID-19 Pandemic: Analysis Rasch Model

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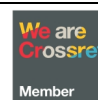
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Original Article

Differences in Early Adult Anxiety during COVID-19 Pandemic: Analysis Rasch Model

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Abstract. Since COVID-19 pandemic entered Indonesia, mental health experts have also investigated the increase in psychological problems, one of which is anxiety. The fear of being infected or unknowingly infecting other people is a major source of anxiety during COVID-19 pandemic. This study aims to describe the differences in early adult anxiety during COVID-19 in terms of gender. This study is a comparative study at the early adult development stage in Indonesia, obtained through random sampling. The sample of this study was 206 people (male, $n = 66$, $M = -2.00$, $SD = +2.30$; female, $n = 140$, $M = -1.87$, $SD = +1.83$). The analysis technique used is the Welch Test on the Rasch model with the help of WINSTEPS Version 3.73. The results show that the tendency for male and female to be in the moderate category and there is no significant difference in anxiety of COVID-19 between male and female early adulthood. The implementation of guidance and counseling is discussed further.

Keywords: Anxiety, Early Adult, Gender, COVID-19, Pandemic.

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Introduction

The Corona virus (COVID-19) outbreak has been a year since it was first identified in mainland China on 31 December 2019, now spreading across the globe. As of December 28, 2020, the number of reported international cases has jumped to more than 81 million (WHO, 2020). Positive cases of COVID-19 in Indonesia were first detected on March 2, 2020 and on April 9, the pandemic has spread to 34 provinces with DKI Jakarta, West Java and Central Java as the provinces most exposed to the corona virus in Indonesia, with a total of 1,2 million positive cases, it is ranked first in Southeast Asia. Psychological problems began to be a serious topic of discussion for psychologists during COVID-19 pandemic, such as causing symptoms of fear (Ahorsu et al., 2020), anxiety (Lee, 2020), stress (Taylor et al., 2020), and marked anxiety syndrome with avoidance, inspection and worry (Nikčević & Spada, 2020).

Data shows that anxiety among healthcare workers during COVID-19 pandemic is significantly higher than that of the general population, ranging from 22.6% to 36.3% (Liu, Gayle, Wilder-Smith, & Rocklöv, 2020). Among healthcare workers, nurses reported experiencing the highest levels of anxiety and the highest prevalence of anxiety, ranging from 15% to 92% (Alwani et al., 2020; Luo, Guo, Yu, & Wang, 2020). The fear of being infected or unconsciously infecting other people is a major source of anxiety in nurses during COVID-19 pandemic (Mo et al., 2020). In addition, there are other factors that cause increased anxiety in nurses, namely: lack of personal protective equipment (PPE), lack of access to COVID-19 testing, fear of transmitting the virus in the workplace, doubt that their agency will support

them if they become infected, lack of access to child care facilities during lockdown, fear of being placed in unfamiliar wards or units and lack of accurate information about COVID-19 (Shanafelt, Ripp, & Trockel, 2020). Likewise, the negative effects arising from heavier levels of anxiety, such as loss of appetite, dizziness, sleep disturbances and vomiting / nausea (Lee, 2020). In fact, decreased body function, stress, depression, and increased suicidal thoughts are associated with negative effects resulting from more severe levels of anxiety (Lee, Jobe, Mathis, & Gibbons, 2020). The COVID-19 pandemic has also raised concerns regarding finances, jobs and economic stability (Pew Research Center, 2020). Home quarantine and social distancing also increase anxiety and negative emotions widely in society (Gao et al., 2020; Qiu et al., 2020; Wang et al., 2020).

Based on the description of the above conditions, The National Health Commission of China (NHCC, 2020) issued a notification on January 26, 2020, providing guidance on the principles of psychological crisis intervention to reduce the psychosocial effects of the COVID-19 outbreak. This notification stipulates that psychological crisis interventions must be part of the public health response to the COVID-19 outbreak, through joint prevention and control mechanisms at the village, city and provincial levels, and interventions must be differentiated by group. The social service workforce for mental health began to intervene, consisting of a psychological outreach team led by psychiatrists and mental health professionals, as well as a psychological support hotline team (Dong & Bouey, 2020). As the virus spreads globally, governments must meet the mental health needs of the public by developing and implementing a well-coordinated strategic plan to meet the needs during COVID-19 pandemic (Dong & Bouey, 2020).

In contrast to China which still has great challenges to successfully implement psychological crisis interventions, the shortage of mental health service providers is a source of problems in implementing psychological crisis interventions, the number of psychiatrists in China is around 1.49 / 100,000 population, and half have not obtained a medical degree, sadly, health care such as nurses is still uneven (Liang, Mays, & Hwang, 2018). For this reason, many volunteers set up psychological support hotlines in various places such as: hospitals, universities, organizations, and various institutions with various levels of qualifications and experience (NHCC, 2020). However, psychological support hotlines still create confusion for people who are in need of services because they are not coordinated and not adequately supervised (Dong & Bouey, 2020).

For this reason, the need for guidance and counseling services to reduce adult feelings of anxiety during COVID-19, and to make it easier for counselors to reduce anxiety, counselors need data on early adult anxiety conditions. The purpose of this study was to describe the differences in anxiety during COVID-19 between male and female early adulthood in Indonesia. The importance of testing anxiety during COVID-19 conditions is to plan a counseling and guidance service program that focuses on treating the mental health of early adult individuals in Indonesia, especially anxiety during COVID-19 pandemic.

Method

This study is a comparative study of early adult individuals, obtained through random sampling.

Participant

The sample in this study amounted to 206 people (male, $n = 66$, $M = -2.00$, $SD = +2.30$; female, $n = 140$, $M = -1.87$, $SD = +1.83$), individuals who were the samples of the study were aged 25-40 years (commonly called early adulthood) spread across Indonesia.

Measure

The results of the RASCH model analysis show that the person reliability score is 0.94, meaning that the quality of the answers given by the respondents is good. And the item reliability score is 0.98 which indicates the quality of the anxiety instrument related to COVID-19 is very good. Meanwhile, the reliability score based on Cronbach's alpha value (KR-20) is 0.95, indicating that the interaction between person and item is good. Besides, the instrument sensitivity value +1.02 logit (INFIT MNSQ); and the overall instrument sensitivity value +1.01 logit (OUTFIT MNSQ) shows that it is still in the ideal range ($+0.5 > \text{MNSQ} < +1.5$; Bond & Fox, 2015b; Boone, Stever, & Yale, 2014; Sandjaja, Syahputra, & Erwinda, 2020; Syahputra, Rangka, Solihatun, Folastrri, & Oktasari, 2020). This indicates that the items on the anxiety instrument have very good quality for measurement conditions carried out during COVID-19 pandemic.

Procedur

Early adults were given an anxiety instrument consisting of 21 items related to COVID-19 that were provided online. Each respondent can choose one of the four alternative answers (starting from 5 = always to 1 = never) provided and 30 minutes of time given to fill in the instrument.

Data Analysis

The analysis technique used is the Welch Test on the Rasch model (Bond & Fox, 2015a; Erwinda, Syahputra, Fadli, & Zola, 2018; Hariyani & Syahputra, 2019; Syahputra, Sandjaja, Afdal, & Ardi, 2019) with the help of WINSTEPS Version 3.73 (Linacre, 2011).

Result and Discussion

The discussion of the results of this study is about the differences in male and female early adult anxiety. Furthermore, the results of the analysis of the difference test for male and female early adult anxiety are presented in Table 1 below.

Table 1. The results of the Welch Test for Early Adult Anxiety in terms of Gender

| Reliability Person | | | Welch | | |
|--------------------|-----|-------------------------|-------|-------|-------|
| L | P | Mean Difference Measure | t | d. f. | Prob. |
| .94 | .94 | -.13 | -.40 | 104 | .691 |

Information: L = Male; P = Female

The results of reliability show that male and female have the same score .94, meaning that early adulthood, male and female both provide good quality answers when answering the anxiety instrument related to COVID-19. Furthermore, Welch's results showed sig = .691, or p-value > 0.05, meaning that there was no significant difference between male's and female's early adult anxiety during COVID-19 pandemic. All individuals carry out quarantine at home, all activities are transferred online, this is what causes individuals, especially early adults, to access all information via smartphones to find information about the development of COVID-19. This is supported by (Elhai, Levine, & Hall, 2019; Yang, Fu, Liao, & Li, 2020) that smartphone addiction is positively correlated with depression and anxiety. People seek emotional assistance from smartphones and internet devices (Brand et al., 2019; Kardefelt-

Winther, 2014). This condition causes smartphone and internet addiction to also increase during COVID-19 Pandemic (Brand et al., 2019; Li et al., 2020). The use of daily internet access for male and female students tends to be the same, what distinguishes it is the use of the internet itself (Syahputra et al., 2019). The research results (Syahputra & Erwindi, 2020) reveal that there is no difference in nomophobia between male and female students, students who also use a lot of internet access (> 8 hours). In contrast to Carli et al.(2013) revealed that women use the internet excessively (66.4%) compared to male (54.9%) and a study in Norway found differences in internet addiction between male and women (Johansson & Gøttestam, 2004).

Based on the explanation above, the researcher clarifies by looking at how the anxious conditions of early adult individuals during COVID-19 pandemic are presented in Figure 1 below.

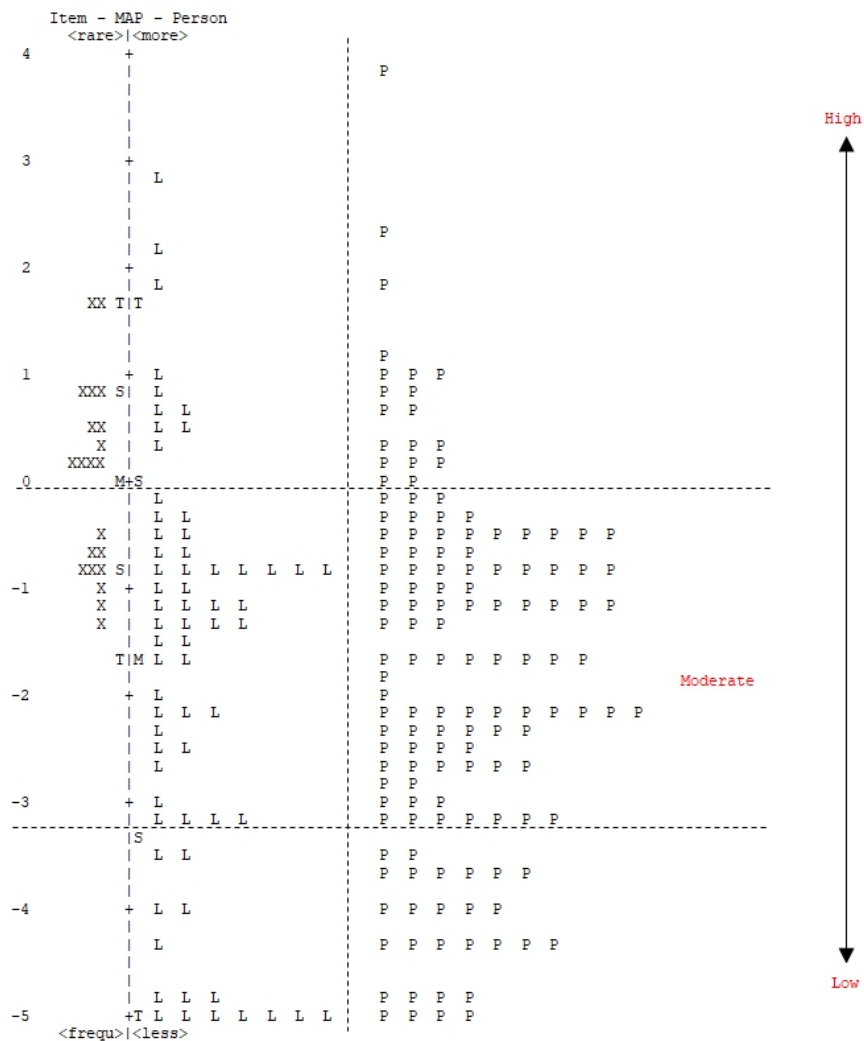


Figure 1. Variable Maps of Differences Anxiety COVID-19 in terms of Gender
Information: L = Male; P = Female

Figure 1 shows that there is no difference in COVID-19 anxiety between male and female early adulthood, the tendency for male and female to be in the moderate category. The impact

of the COVID-19 pandemic raises concerns regarding finance, jobs and economic stability (Pew Research Center, 2020). Home quarantine and social distancing also increase anxiety and negative emotions widely in society (Gao et al., 2020; Qiu et al., 2020; Wang et al., 2020). Research on anxiety before and during social distancing in adults in southern Brazil (Feter et al., 2020) reveals the impact of the COVID-19 pandemic on work-related activities and the economic situation examined with the following question: “Does social distancing affect your monthly income? ”If there is a firm response, participants report whether expectations have decreased or increased during COVID-19 pandemic (Feter et al., 2020). In addition, anxiety related to news of death from COVID-19 is mitigated by playing smartphones excessively (Elhai, Yang, McKay, & Asmundson, 2020), this has caused smartphone addiction to increase during COVID-19 pandemic.

| MOST UNEXPECTED RESPONSES | |
|---------------------------|---------------------------|
| Person MEASURE | Item |
| | 11 11 1 122 11 11 |
| | 184428955109361670273 |
| | high----- |
| 61 P | 3.77 T 1. |
| 188 L | 2.90 M 22.2.2.... |
| 31 P | 2.25 1. |
| 107 L | 2.11 B .1...2.....1. |
| 150 P | 1.83 U ...2.....1.... |
| 195 L | .60 1.....1.... |
| 92 L | .25 F .1.....44.1.4... |
| 130 P | .25 K 4..1144... |
| 23 L | -.31 .1...1..... |
| 162 P | -.31 ...1.....3. |
| 178 P | -.43 ...4.....4.... |
| 136 L | -1.00 4..... |
| 102 P | -1.11 H .11..4.....3. |
| 175 L | -1.11 ...44.....3. |
| 5 P | -1.23 D 44444144..... |
| 115 L | -1.35 ...4.....3.... |
| 187 L | -1.35 4..... |
| 8 L | -1.47 I 4...3.. |
| 52 P | -1.95 V 3...3... |
| 85 P | -2.25 33.3..... |
| 86 P | -2.25 3..... |
| 89 P | -2.25 J ...4.....4...2. |
| 64 P | -2.39 33..... |
| 200 P | -2.39 ...4..... |
| 71 L | -2.54 33..... |
| 63 P | -2.70 L ...4...4..... |
| 142 L | -2.70 A ...4...4...4.... |
| 180 P | -2.87 N 3. |
| 6 P | -3.05 Q 22.22 |
| 37 L | -3.05 2. |
| 66 P | -3.05 2. |
| 103 P | -3.05 2.2. |
| 100 P | -3.25 ...3..... |
| 114 P | -3.25 S ...3...3...2... |
| 197 P | -3.25 ...3...3..... |
| 88 P | -3.47 X 333..... |
| 125 L | -3.47 Y 333..... |
| 177 P | -3.47 2. |
| 46 L | -3.99 2.2...2.. |
| 51 P | -3.99 2..... |
| 54 P | -3.99 2..... |
| 190 P | -3.99 2...2... |
| 119 P | -4.34 2...2... |
| 128 P | -4.34 2...2..... |
| 194 P | -4.34 ...3...2..... |
| 28 P | -4.80 E 2..... |
| 40 L | -4.80 2...2..... |
| 156 L | -4.80 P ...3..... |
| 158 L | -4.80 .2...2..... |
| 182 P | -4.80 C 2.....2 |
| | -----low |
| | 114118151229111611273 |
| | 18 42 9 510 36 70 |

Figure 2. Most Unexpected Person Measure Anxiety COVID-19
Information: L = Male; P = Female

Unexpected results showed that the person code on the left, male and female, there was no difference in COVID-19 anxiety, which was indicated by male and female representatives at each level of COVID-19 anxiety ranging from low -4.80 to high +3.77 logit. Based on these

results it is stated that the anxiety of COVID-19 can affect anyone, both male and female who have entered early adulthood. Mental health experts (Bloom, Black, & Rappuoli, 2017; Kim & Park, 2017) reveal important factors that protect social workers from the risk of anxiety and stress, namely personal resilience, social support, and organizational support. Research in the health sector (Hart, Brannan, & De Chesnay, 2014) shows resilience helps nurses deal with stress, by bouncing back or recovering quickly from stressful events. In addition, there is a positive effect of social support on nurses' job satisfaction, work commitment, health and well-being (Choi, 2018). Social support is an important factor to help health workers manage stressful events, including emergency situations, catastrophic events and infectious disease outbreaks (Kim & Park, 2017). In addition, the role of counselors, psychologists, and psychiatrists is needed to reduce feelings of stress and anxiety (Dong & Bouey, 2020) during COVID-19 pandemic and post-pandemic. Das (2020) suggests three main problems that must be overcome by fellow psychiatrists: (1) conducting research to produce new findings, (2) generating awareness and psychological readiness among the community and essential service providers, (3) providing active psychological and psychiatric interventions to those in need. Based on these conditions, there is a need for a program of guidance and counseling services on how to reduce anxiety during the COVID-19 pandemic through ten guidance and counseling services, and several therapeutic techniques such as art therapy, hypnotherapy, and chromotherapy, as well as the need for further research related to anxiety of COVID-19 to be reviewed from other developmental stages, namely: children, adolescents, middle adults and early adults.

Conclusion

The results show that the tendency for male and female to be in the moderate category and there is no significant difference in anxiety of COVID-19 between male and female early adulthood. In this condition, there is a need for guidance and counseling service programs on how to reduce anxiety during COVID-19 pandemic through ten guidance and counseling services, and several therapeutic techniques such as art therapy, hypnotherapy, and chromotherapy, as well as the need for further research related to anxiety during COVID-19 to be reviewed from other developmental stages, namely: children, adolescents, middle adults and early adults.

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References

- Ahorsu, D. K., Lin, C. Y., Imani, V., Saffari, M., Griffiths, M. D., & Pakpour, A. H. (2020). The fear of COVID-19 Scale: Development and initial validation. *International Journal of Mental Health and Addiction*, 1–9.
- Alwani, S. S., Majeed, M. M., Hirwani, M. Z., Rauf, S., Saad, S. M., Shah, S. H., & Hamirani, F. M. (2020). Evaluation of knowledge, practices, attitude and anxiety of Pakistani nurses towards COVID-19 during the current outbreak in Pakistan. *medRxiv*, 1–26.

- Bloom, D. E., Black, S., & Rappuoli, R. (2017). Emerging infectious diseases: A proactive approach. *Proceedings of the National Academy of Sciences*, *114*(16), 4055–4059.
- Bond, T. G., & Fox, C. M. (2015a). *Applying the Rasch Model, Fundamentals Measurement in the Human Science* (3rd Edition). New York: Routledge.
- Bond, T. G., & Fox, C. M. (2015b). *Applying the Rasch Model, Fundamentals Measurement in the Human Science* (3rd edition). New York: Routledge.
- Boone, W. J., Stever, J. R., & Yale, M. S. (2014). *Rasch Analysis in the Human Science*. Dordrech: Springer.
- Brand, M., Wegmann, E., Stark, R., Müller, A., Wölfling, K., Robbins, T. W., & Potenza, M. N. (2019). The Interaction of Person-Affect-Cognition-Execution (I-PACE) model for addictive behaviors: Update, generalization to addictive behaviors beyond internet-use disorders, and specification of the process character of addictive behaviors. *Neuroscience & Biobehavioral Reviews*, *104*, 1–10.
- Carli, V., Durkee, T., Wasserman, D., Hadlaczky, G., Despalins, R., & Kramarz, E. (2013). The association between pathological internet use and comorbid psychopathology: a systematic review. *Psychopathology*, *46*, 1–13. Retrieved from <http://dx.doi.org/10.1159/000337971>
- Choi, B. S. (2018). Influence of social support and resilience on the nurse job performance. *Indian Journal of Public Health Research & Development*, *9*(3), 788–792.
- Das, N. (2020). Psychiatrist in post-COVID-19 era – are we prepared? *Asian Journal of Psychiatry*, 102082. <https://doi.org/10.1016/j.ajp.2020.102082>
- Dong, L., & Bouey, J. (2020). Early Release - Public Health Crisis during COVID-19 Pandemic, China. *Emerging Infectious Diseases Journal*, *26*(7).
- Elhai, J. D., Levine, J. C., & Hall, B. . (2019). The relationship between anxiety symptom severity and problematic smartphone use: a review of the literature and conceptual frameworks. *Journal Anxiety Disorder*, *62*, 45–52.
- Elhai, J. D., Yang, H., McKay, D., & Asmundson, G. J. (2020). COVID-19 anxiety symptoms associated with problematic smartphone use severity in Chinese adults. *Journal of Affective Disorders*, *274*, 576–582.
- Erwindia, L., Syahputra, Y., Fadli, R. P., & Zola, N. (2018). Rasch politomy analysis: measuring the level of student senior high school resilience after the disaster in West Sumatra. *Konselor*, *7*(4), 138–144.
- Feter, N., Caputo, E. L., Doring, I. R., Leite, J. S., Cassuriaga, J., Reichert, F. F., ... Rombaldi, A. J. (2020). Sharp increase in depression and anxiety among Brazilian adults during COVID-19 pandemic: findings from the PAMPA cohort. *Public Health*, *190*, 101–107.
- Gao, J., Zheng, P., Jia, Y., Chen, H., Mao, Y., Chen, S., ... Dai, J. (2020). Mental health problems and social media exposure during COVID-19 outbreak. *Plos One*, *15*(4), e0231924.
- Hariyani, H., & Syahputra, Y. (2019). Whether there effect of the used video on group guidance services to aggressive behavior? *Konselor*, *8*(3), 92–97.
- Hart, P. L., Brannan, J. D., & De Chesnay, M. (2014). Resilience in nurses: An integrative review. *Journal of Nursing Management*, *22*(6), 720–734.
- Johansson, A., & Götestam, K. G. (2004). Internet addiction: characteristics of an questionnaire and prevalence in Norwegian youth (12–18 years). *Scandinavian Journal of Psychology*, *45*, 223–229.
- Kardefelt-Winther, D. (2014). A conceptual and methodological critique of internet addiction research: Towards a model of compensatory internet use. *Computers in Human Behavior*, *31*, 351–354.
- Kim, H. J., & Park, H. R. (2017). Factors affecting post-traumatic stress of general hospital nurses after the epidemic of Middle East respiratory syndrome infection. *Journal of Korean Clinical Nursing Research*, *23*(2), 179–188.
- Lee, S. A. (2020). Coronavirus Anxiety Scale: A brief mental health screener for COVID-19

- related anxiety. *Death Studies*, 44(7), 393–401.
- Lee, S. A., Jobe, M. C., Mathis, A. A., & Gibbons, J. A. (2020). Incremental validity of coronaphobia: Coronavirus anxiety explains depression, generalized anxiety, and death anxiety. *Journal of Anxiety Disorders*, 74, 102268.
- Li, Q., Guan, X., Wu, P., Wang, X., Zhou, L., Tong, Y., ... Feng, Z. (2020). Early transmission dynamics in Wuhan, China, of novel coronavirus-infected pneumonia. *New England Journal of Medicine*, 382, 1199–1207.
- Liang, D., Mays, V. M., & Hwang, W. C. (2018). Integrated mental health services in China: challenges and planning for the future. *Health Policy and Planning*, 33(1), 107–122.
- Linacre, J. M. (2011). *A User's Guide to WINSTEPS Ministeps Rasch-Model Computer Programs*. <https://doi.org/ISBN-0-941938-03-4>
- Liu, Y., Gayle, A. A., Wilder-Smith, A., & Rocklöv, J. (2020). The reproductive number of COVID-19 is higher compared to SARS coronavirus. *Journal of Travel Medicine*, 27(2), 1–4.
- Luo, M., Guo, L., Yu, M., & Wang, H. (2020). The reproductive number of COVID-19 is higher compared to SARS coronavirus. *Journal of Travel Medicine*, 27(2), 1–4.
- Mo, Y., Deng, L., Zhang, L., Lang, Q., Liao, C., Wang, N., ... Huang, H. (2020). Work stress among Chinese nurses to support Wuhan in fighting against COVID-19 epidemic. *Journal of Nursing Management*, 28(5), 1002–1009.
- NHCC, N. H. C. of C. (2020). Principles of the emergency psychological crisis interventions for the new coronavirus pneumonia [in Chinese]. Retrieved from <http://www.nhc.gov.cn/jkj/s3577/202001/6adc08b966594253b2b791be5c3b9467>
- Nikčević, A. V., & Spada, M. M. (2020). The COVID-19 Anxiety Syndrome Scale: Development and psychometric properties. *Psychiatry Research*, 292, 113322.
- Pew Research Center. (2020). Worries about Coronavirus Surge, as Most Americans Expect a Recession – or Worse. Pew Research Center. Pew Research Center.
- 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*, 33(2), e100213.
- Sandjaja, S. S., Syahputra, Y., & Erwinda, L. (2020). Validasi skala penilaian instrumale perencanaan karier malegunakan Andrich Threshold. *Persona: Jurnal Psikologi Indonesia*, 9(1), 105–117.
- Shanafelt, T., Ripp, J., & Trockel, M. (2020). Understanding and addressing sources of anxiety among health care professionals during COVID-19 pandemic. *JAMA*, 323(21), 2133–2134.
- Syahputra, Y., & Erwinda, L. (2020). Perbedaan Nomophobia mahasiswa; analisis Rasch. *JPPi (Jurnal Penelitian Pendidikan Indonesia)*, 6(2), 69–76. <https://doi.org/https://doi.org/10.29210/02020616>
- Syahputra, Y., Prayitno, P., Syahniar, S., & Hariyani, H. (2019). Rasch stacking analysis of student internet addiction based on gender. *Jurnal Konseling Dan Pendidikan*, 7(1), 35–41.
- Syahputra, Y., Rangka, I. B., Solihatun, S., Folastris, S., & Oktasari, M. (2020). malegukur Sifat Psikometri Phubbing Scale (PS): Rasch Measurement Tool (RMS). *In Seminar Nasional Daring IIBKIN 2020*, 120–128.
- Syahputra, Y., Sandjaja, S. S., Afdal, A., & Ardi, Z. (2019). Development of an inventory of homosexuality and transgender exposure (IHTE): A Rasch analysis. *Konselor*, 8(4), 120–133.
- Taylor, S., Landry, C. A., Paluszec, M. M., Fergus, T. A., McKay, D., & Asmundson, G. J. G. (2020). Development and initial validation of the COVID Stress Scales. *Journal of Anxiety Disorders*, 72, 102232.
- Wang, C., Pan, R., Wan, X., Tan, Y., Xu, L., Ho, C. S., & Ho, R. C. (2020). Immediate psychological responses and associated factors during the initial stage of the 2019

- coronavirus disease (COVID-19) epidemic among the general population in China. *International Journal of Environmental Research and Public Health*, 17(5), 1729.
- WHO. (2020). 2019 Novel coronavirus (2019-nCoV): strategic preparedness and response plan. Retrieved from <https://www.who.int/docs/default-source/coronaviruse/srp-04022020.pdf>
- Yang, J., Fu, X., Liao, X., & Li, Y. (2020). Association of problematic smartphone use with poor sleep quality, depression, and anxiety: A systematic review and meta-analysis. *Psychiatry Research*, 284, 112686.