

Psychological well-being and stress on the Seafarer

Marchelina Febe Sumbaga^{1*}, Nicholas Ryan²

¹ Bunda Mulia University, Jakarta; Indonesia*

² Bunda Mulia University, Jakarta; Indonesia

¹ msumbaga@bundamulia.ac.id; ² nicholasryan627@gmail.com

*Correspondent Author

KEYWORDS

ABSTRACT

**Psychological well being
work stress
seafarer's**

During the Covid 19 pandemic, many individuals were vulnerable to stress, including workers, especially those working on the high seas (seafarer's). As happened with Indonesian crew members who work for cruise ships, based on the results of brief interviews with crew members who worked during this pandemic, they rarely returned home to meet their families. They are required to work more on the ship but are not allowed to go home to spend time with their families. On average, the crew members who work on ships do not want to take risks by recruiting new employees or staying in one place for a long time due to the COVID pandemic. They only have two choices: to continue working or change jobs and look for new jobs on land. Situations like this seem to trigger stress on the crew, which will impact their psychological well-being from the crew (Rider, 20171). This attracts attention to facilitating the crew members to become comfortable with their working environment for a long time by knowing the condition of the ship's psychological well-being. It is expected to reduce the stress level on the crew.

This is an open-access article under the [CC-BY-SA](#) license.



Introduction

Earth is the only planet in the solar system that has liquid on its surface (oceans) (Wikipedia, 20222). The sea on Earth is known to be more prominent in mass because it can reach 70%, compared to land, with a mass of around 30%. Undoubtedly, this will affect the increasing need for marine power in both national and international realms (Admin, 20203). Getting a job on the high seas will differ significantly from the positions we usually encounter daily. Work on the high seas has an irregular pattern of work, both the type of work and time to rest. Of course, this will have an impact on physical health. But not only physically, but also work on the high seas has a mental effect because these sea workers must be willing to be away from their families. Apart from that, there is also inner pressure when they work on the high seas. Many things cannot be predicted, such as the weather. A work environment like this can lead to feelings of anxiety, fear, and worry. It might even become a traumatic event when dealing with extreme weather. Not to mention when faced with the Covid 19 pandemic as is happening now.

Several articles discuss the situations and conditions experienced by workers on the high seas during the pandemic. For example, Wong was refused in several places to dock to repair his ship, because many areas carried out quarantine for up to 3 months, turning around on the high seas to find areas that would accept him anchored without any clarity on the status and also the condition of the ship that was getting worse, accompanied by the depletion of material. Food (Tan, 20204). Then there was the MS Westerdam cruise ship, which drifted at sea for more than 14 days because it was refused by 5 ports in Asia (BBC Indonesia, 20205). There is a fear that they will bring the coronavirus into the countries where they will land. It is a different matter with the crew members on the Long Xing 629 ship, which has been travelling at sea for almost 14 months. These workers have irregular sleep hours and only about 3 hours per day. They also receive less nutrition even though they are physically required to be strong (Affan, Wijaya, 20206). This is felt to worsen their condition when forced to work.

Apart from demanding physical strength, tasks that have the potential for danger, and long and erratic working hours, these ABK workers have feelings of anxiety and worry and feel lonely because they miss their family at home (Urdahl, 20197). Another reason is that crew members will usually enter into long-term employment agreements (Seafarer's Employment Agreements (SEAs)) to remain working on the ship. This will give sea workers (ABK) a high enough potential to experience poor mental health conditions (SRS E-Bulletin, 20218). Even though their health is affected, it will undoubtedly impact decreasing performance and also affect the safety of the crew members when working on the high seas (Maritimewellbeing, 20229). For this reason, it is essential to look at the psychological well-being of the crew members so that efforts can be made to improve it, considering how important the welfare of the crew members is.

Method

The method used in this research is quantitative, where online questionnaires will be distributed via g.form. For the questionnaire that will be used, adapted from the theory of personal development (Ryff, 1989) regarding psychological well-being, the questionnaire from Ryff has 84 item statements which have been modified into 18 item statements that cover the six aspects of psychological well-being, that is self-acceptance, personal relation with other, autonomy, environmental mastery, purpose in life and personal growth.

While the second questionnaire uses a scale Perceived Stress Scale courtesy of Sheldon Cohen (199420), which contains 10 item statements to measure work stress. Then, it will be calculated with an auxiliary application, SPSS to see the relationship between PWB and work stress.

The characteristics of subjects in this study were crew members who had been at sea for at least one month without meeting their families, both married and unmarried. This is because workers who have not seen their families for a long time tend to be more susceptible to stress which will affect their mental condition, which can impact the physical health of these workers (Sampson, 2018).19). For the number of subjects in this study, there were around 100 crew members from 4 different ships, both from Indonesia and from outside Indonesia. The possibility of the subject will be able to continue to grow.

Result and Discussion

Based on the results of SPSS ver 26 calculations, the reliability measurement results for the psychological well-being measurement tool were 0.945. This measure has excellent reliability (details can be seen in Table 1). As for the validity of this measuring tool, it was found that 8 items were dropped out of 18 item statements. The items that fall are item numbers 3, 4, 5, 6, 7, 10, 14 and 16 because they have a value below 0.3 (details can be seen in Table 2).

Table 1 Reliability of Psychological Well-being

| Reliability Statistics | |
|------------------------|------------|
| Cronbach's Alpha | N of Items |
| .945 | 10 |

Table 2 Psychological Well-being Validity

| Item-Total Statistics | | | | |
|-----------------------|----------------------------|--------------------------------|----------------------------------|----------------------------------|
| | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected Item-Total Correlation | Cronbach's Alpha if Item Deleted |
| PWB1 | 21.31 | 112.561 | .924 | .933 |
| PWB2 | 21.31 | 112.561 | .924 | .933 |
| PWB8 | 21.08 | 105.964 | .901 | .933 |
| PWB9 | 21.44 | 118.311 | .847 | .938 |
| PWB11 | 21.17 | 111.057 | .938 | .932 |
| PWB12 | 20.78 | 110.006 | .947 | .931 |
| PWB13 | 20.56 | 118.083 | .699 | .942 |
| PWB15 | 19.33 | 121.429 | .346 | .965 |
| PWB17 | 21.06 | 106.625 | .959 | .930 |
| PWB18 | 20.72 | 119.121 | .532 | .951 |

As for the reliability calculation of the Perceived Stress Scale measuring instrument, the result is 0.860. This means that the reliability of this measuring instrument has entered into the excellent category (details can be seen in Table 3). And for calculating the validity, it was found that 5 items were dropped out of 10 item statements. These items are item numbers 4, 5, 7, 8 and 9. These items are invalid because they have a value below 0.3 (details can be seen in Table 4).

Table 3 Reliability of the Perceived Stress Scale

| Reliability Statistics | |
|------------------------|------------|
| Cronbach's Alpha | N of Items |
| .860 | 5 |

Table 4 Perceived Stress Scale Validity

| Item-Total Statistics | | | | |
|-----------------------|----------------------------|--------------------------------|----------------------------------|----------------------------------|
| | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected Item-Total Correlation | Cronbach's Alpha if Item Deleted |
| PSS1 | 9.03 | 16.713 | .728 | .817 |
| PSS2 | 9.19 | 16.618 | .872 | .784 |
| PSS3 | 9.06 | 14.797 | .801 | .796 |
| PSS6 | 9.56 | 18.825 | .576 | .854 |
| PSS10 | 9.28 | 20.206 | .444 | .883 |

In this study, a correlation test was also carried out to determine whether a relationship existed between one variable and another. Or the relationship between psychological well-being and stress on crew members. From the correlation test results, it was found that $r = 0.406$ and $p = 0.002$, where $p < 0.01$, so H_0 was rejected, and H_1 was accepted. It means a positive and significant relationship exists between psychological well-being and stress. When crew members feel stressed because of the heavy workload, this affects their psychological well-being (details can be seen in Table 5).

Table 5 Correlation test

| Correlations | | | | |
|--|----------|-------------------------|----------|----------|
| | | | TOTALPWB | TOTALPSS |
| Kendall's tau_b | TOTALPWB | Correlation Coefficient | 1.000 | .406** |
| | | Say. (2-tailed) | . | .002 |
| | | N | 36 | 36 |
| | TOTALPSS | Correlation Coefficient | .406** | 1.000 |
| | | Say. (2-tailed) | .002 | . |
| | | N | 36 | 36 |
| **. Correlation is significant at the 0.01 level (2-tailed). | | | | |

Conclusion

Diener (2000) 21 states that a person's happiness affects the psychological well-being of the person. One of the factors that affect happiness is the level of stress. This is in accordance with the results of our research which states that the psychological well-being of crew

members is affected by stress. There is a significant positive relationship between these two variables. To improve the psychological well-being of individuals, it is hoped that we can reduce the level of existing stressors. In line with what was stated by Seligman and Csikszentmihalyi (2005)²², we can increase happiness by focusing on positive experiences and giving different meanings when we get negative stressors (turning them into positive things). In this section, we welcome you to include a summary of the results of your research with concise sentences as answers to research questions or as proof of research hypotheses.

References

- Admin. (2020). Kesabaran seorang pelaut, coping stress pelaut saat berlayar. Diakses pada 17 Februari 2022. <https://cabmakassar.org/kesabaran-seorang-pelaut-coping-stress-pelaut-saat-berlayar/>
- Affan, H. Wijaya, C. (2020). ABK Indonesia di kapal China: 'Tidur hanya tiga jam, makan umpan ikan', hingga pengalaman pahit yang sulit dilupakan melarung jenazah teman. Diakses 9 Februari 2022. <https://www.bbc.com/indonesia/dunia-52466661>
- BBC Indonesia. (2020). Virus corona: Ditolak Thailand, Taiwan, Guam, dan Jepang, kapal pesiar itu akhirnya diizinkan berlabuh di Kamboja. Diakses pada 10 Februari 2022. <https://www.bbc.com/indonesia/dunia-51486051>
- Birren, J. E. & Renner, V. J. (1980). *Concepts And Issues Of Mental Health And Aging*. In J. E. Birren & R. B. Sloane (Eds), *Handbook of mental health and aging*. Englewood Cliffs, N.J.: Prentice-Hall. (Pp. 3-33.)
- Bradburn, N. M. (1969). *The Structure Of Psychological Well-being*. National Opinion Research Center Monographs In Social Research. Chicago: Aldine Publishing Company
- BlackBurn, Pennie. (2022). *SHIP (Seafarer's Health Information Programme). Psychological Well Being at Sea, A good Mental Health Guide for Seafarer's*. Iswan. United Kingdom
- Cohen, S. (1994). *Perceives Stress Scale*. United Kingdom: Mind Garden Inc.
- Diener E. (2000). Subjective well-being: The science of happiness and a proposal of a national index. *American Psychologist*, 55, 34-43.
- International Committee on Seafarers' Welfare. (2009). *Guidelines for Mental Care Onboard Merchant Ships*. Diakses pada 12 Februari 2022. http://www.seafarerstrust.org/wpcontent/uploads/2016/02/A4-GUIDELINES_MENTALCARE_HIGH_RES.pdf
- Jonglertmontree, W. dkk. (2022). Mental health problems and their related factors among seafarer's: A scoping review. *BMC Public Health* 22:282
- Maritimewellbeing. (2022). Steping Stones and Health Well-being. Diakses pada 10 Februari 2022. https://www.maritimewellbeing.com/category.aspx?cat_id=1000
- Maslow, A. H. (1970). *Motivation and Personality (2nd ed)*. New York: Harper and Row.
- Rider, D.M. (2017). *Caring for Seafarer's Mental WellBeing*. United Kingdom: the Seamens Cruch Institute.
- Ryff, C. D. (1989b). Happiness is everything, or is it? Explorations on the meaning of psychological well-being. *Journal of Personality and Social Psychology*, 57,1069-1081.
- Ryff, C. D. (1989a). Beyond Ponce de Leon and life satisfaction: New directions in quest of successful aging. *International Journal of Behavioral Development*, 12, 35-55
- Sampson, H. Ellis, N. (2018). *Seafarer's Mental health and WellBeing*. United kingdom: Cardiff university, IOSH Seafarer's International Research Centre, School of Social Science.
- Seligman, M. E. P., & Csikszentmihalyi, M. (2000). Positive psychology: An introduction. *American Psychologist*, 55(1), 5-14.

- SRS E Bulletin. (2021). Eafarer Happiness Index (SHI) Report – Caring for Seafarers' Mental Well-Being. Diakses pada 11 Februari 2022. <https://www.mpa.gov.sg/assets/srs/e-bulletins/Issue21/case-studies/seafarers.html>
- Tan, Y. (2020). Kisah pelaut terombang-ambing selama tiga bulan di lautan Pasifik karena karantina wilayah: 'Saya mendekati beberapa pulau, tapi semua mengusir saya'. Diakses pada 10 Februari 2022. <https://www.bbc.com/indonesia/majalah-52585096>
- Urdahl, K. (2019). Seafarers' mental health and well-being. Diakses pada 11 Februari 2022. <https://www.gard.no/web/updates/content/28743345/seafarers-mental-health-and-wellbeing>
- Wikipedia. (2022). Laut. Diakses pada 28 Februari 2022. <https://id.wikipedia.org/wiki/Laut#:~:text=Laut%20di%20Bumi%20memiliki%20volume,lebih%20dari%2070%25%20permukaan%20Bumi.>