Psychological wellbeing and sustainable development of coastal community: a literature review

L. S., Palupi*12345
1Departmen Psikologi, Fakultas Psikologi, Universitas Airlangga, Surabaya, Indonesia
2Addiction Study Centre, Universitas Airlangga, Surabaya, Indonesia.
3Health and Environmental Sustainability (HES) Research Group, Universitas Airlangga, Surabaya, Indonesia.
4Psikologi Perubahan Sosial & Teknologi (Psychology of Social Change & Technology) Research Group, Universitas Airlangga, Surabaya, Indonesia.
5Direktorat Riset dan Pengabdian Masyarakat (DRPM) RISTEKDIKTI Indonesia
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*Corresponding author: listyati.palupi@psikologi.unair.ac.id

Abstract. Nowadays wellbeing has been closely related to development. The knot was tied in the Sustainable Development Goals. Wellbeing has been acknowledged as the third goals that need to be achieve by all of the member state. Countries need to assure that they provide good health and wellbeing to its people including for the coastal communities. Albeit the important role of wellbeing on sustainable development is recognize, however the relationship between psychological wellbeing and sustainable development between coastal communities is not widely explore. Therefore, aim of this study is to analyse the link between psychological wellbeing and sustainable development of coastal communities using literature review method to assess what has been found in previous study that link psychological wellbeing and sustainable development in the context of coastal communities and what things that need to improve in the future to advance the understanding of the relationship between psychological wellbeing and sustainable development. It is found that the study of the relationship between psychological wellbeing and sustainable development of coastal communities is still limited. Furthermore, psychological wellbeing is still not yet considered in the development of coastal community measurement. Therefore, psychological wellbeing should be integrated in sustainable development of coastal community measurement tool.

1. Introduction
Nowadays wellbeing has been closely related to development. The knot was tied in the Sustainable Development Goals. Wellbeing has been acknowledged as the third goals that need to be achieve by all of the member state. Countries need to assure that they provide good health and wellbeing to its people including for the coastal communities.

Factors that has been identified influence individual psychological wellbeing. Factors that sourced from the individual internal state are skills which relate to interaction with other, openness, self-evaluations, awareness, self-efficacy, age, motivation and personality [1]–[7]. Income, financial
capability, and cultural background is considered as external factors that correlate with psychological wellbeing [8], [9].

Researches has found that psychological wellbeing is connected with mental health, social support, and gratitude [10]–[18]. Psychological wellbeing was also correlated with physical health [19], [20]. Albeit the important role of wellbeing on sustainable development is recognize, however the relationship between psychological wellbeing and sustainable development between coastal communities is not widely explore.

Therefore, purpose of this study is to analyze the relationship between psychological wellbeing and sustainable development of coastal communities using literature review method to assess what has been found in previous study that link psychological wellbeing and sustainable development in the context of coastal communities and what things that need to improve in the future to advance the understanding of the relationship between psychological wellbeing and sustainable development.

2. Methodology

2.1 Eligibility Criteria and Search Strategies
The objective of this study is to analyze the relationship between psychological wellbeing and sustainable development of coastal community construct in the literature and how it is described. Therefore, relevant peer-reviewed papers were identified from an extensive collection from the two top list of academic research databases [21] that could be access through Universitas Airlangga library. The literature search was conducted in May 2021. This study employs Preferred Reporting Item for Systematic Reviews and Meta-analyses (PRISMA) standard [22].

The search string used in Web of Science (WOS) are: (wellbeing OR well-being OR happiness OR life satisfaction OR positive affect OR negative affect OR PANAS) AND (sustainable development OR SDG OR sustainable) AND (coastal communities OR coastal area OR coastal society).

The search string used in Scopus databases are: ( TITLE-ABS-KEY (psychological AND wellbeing) OR TITLE-ABS-KEY (subjective AND wellbeing) OR TITLE-ABS-KEY (happiness) OR TITLE-ABS-KEY (life AND satisfaction) OR TITLE-ABS-KEY (positive AND affect) OR TITLE-ABS-KEY (negative AND affect) OR TITLE-ABS-KEY (panas) OR TITLE-ABS-KEY (sustainable AND development) OR TITLE-ABS-KEY (sustainable AND development AND goals) OR TITLE-ABS-KEY (coastal AND community) OR TITLE-ABS-KEY (coastal AND area) OR TITLE-ABS-KEY (coastal AND society)) AND PUBYEAR > 2009 AND PUBYEAR < 2021 AND (LIMIT-TO (SRCTYPE, "j") OR LIMIT-TO (SRCTYPE, "p")) AND (LIMIT-TO (OA, "all")) AND (LIMIT-TO (DOCTYPE, "ar") OR LIMIT-TO (DOCTYPE, "cp") OR LIMIT-TO (DOCTYPE, "cr") OR LIMIT-TO (DOCTYPE, "re")) AND (LIMIT-TO (LANGUAGE, "English")). The article that was identified in the Scopus databases are 59 articles.

2.2 Inclusion Criteria
Papers that described the concept of psychological wellbeing and sustainable development of the coastal communities have been included. English open access articles from Scopus and Web of Science database which are published between 2010 and 2020 and could be access from the Universitas Airlangga library were reviewed systematically.

2.3 Exclusion Criteria
Specific terms were used as a keyword in the search process. Paper that are inaccessible from Universitas Airlangga library and articles that does not discuss about psychological wellbeing and its relationship with sustainable development were excluded from the analysis.
2.4 Selection of Articles and Analysis
There are 108 articles that are identified from Scopus dan Web of Science databases. The identified article than are screened before proceed to further analysis. There are three steps that are applied to screen all of the articles.

The title of the article were assessed in the first step. Open access article that has one of the keywords either wellbeing, psychological wellbeing, happiness, life satisfaction, positive affect, negative affect, and sustainable development, SDG, sustainable, coastal communities, coastal area and coastal society will be selected. The result of first step is 12 article and 9 article, from Scopus and Web of Science database respectively, that has relevant title. Second step, full paper of each of articles is downloaded from University Airlangga library collection. Articles that are downloadable were then proceed to the third step. The second step resulted in 2 article that are downloadable from Scopus database and 9 article from Web of Science database. The last step in the selection process is excluding the articles which did not meet the inclusion criteria. As a result, from this step is elimination of 2 articles from the Scopus databases and 9 articles from Web of Science database were further analyzed.

2.5 Extraction and Management of Data
Data that were extract from the articles are name of the authors, title, publication year, keyword, focus, targeted stakeholder and setting. The papers were categorized by subject, and after the data completely collected that the fields were determined. PRISMA framework used to manage the data extracted from the articles.

The total number of articles that has been through four steps of screening process are 11 with 2 of them are from Scopus database and 9 of the articles are registered in the Web of Science database. evaluated. The article that are selected were English Language article and therefore studies which are in language other than English were not included in the analysis.

3 Results
The focus of this study is to identify the link between psychological wellbeing and sustainable development. Thereof the 11 articles that has been screened through three steps of screening processes are analyze further. The final phase has found 11 articles that are relevant with the purpose of the study. The figure 1 depict the articles search and screening process.
Figure 1. The search and screening process.
The subtractions element of the papers were summarized in tables 1 below.

**Table 1. Data extraction summary.**

| Paper ID                                                                 | Year | Focus                                                                 | Country             | References |
|--------------------------------------------------------------------------|------|----------------------------------------------------------------------|---------------------|------------|
| Performance Indicator Framework for Evaluation of Sustainable Tourism in the Taiwan Coastal Zone. | 2016 | Performance indicator of coastal tourism and prominent factors that affecting the sustainable development of coastal tourism in Taiwan. | Taiwan              | [23]       |
| Towards Sustainable Development of Coastal Fisheries Resources in Bangladesh: An Analysis of the Legal and Institutional Framework. | 2017 | The policies, laws and institutional mechanisms that regulate the coastal fisheries resources in the Bangladesh. | Bangladesh          | [24]       |
| Measuring and comparing the sustainability of coastal tourism destinations in Germany, Lithuania, and Indonesia. | 2018 | Self-assessment tool for sustainable coastal tourism development. | Germany, Lithuania, Indonesia | [25]       |
| Maximising community wellbeing: Assessing the threats to the benefits communities derive from the marine estate. | 2019 | Assessment of social aspect of sustainable development. | Australia           | [26]       |
| A practical framework of quantifying climate change-driven environmental losses (QuantiCEL) in coastal areas in developing countries. | 2019 | Assessment of the monetary value of environmental losses induce by climate change. | Indonesia, Bangladesh, Sri Lanka | [27]       |
| Enhancing coastal livelihoods in Indonesia: an evaluation of recent initiatives on gender, women and sustainable livelihoods in small-scale fisheries. | 2019 | Enhancing the role of gender especially women in sustainable development. | Indonesia           | [28]       |
| Sustaining Canadian marine biodiversity: Policy and statutory progress. | 2020 | Canadian marine biodiversity policy. | Canada              | [29]       |
| Planning island sustainable development policy based on the theory of ecosystem services: A case study of Zhoushan Archipelago, East China. | 2020 | Sustainable development policy and planning in Zhoushan Archipelago, East China. | China               | [30]       |
| Stakeholder Perspectives on Opportunities and Challenges in Achieving Sustainable Growth of the Blue Economy in a Changing Climate. | 2020 | Assessment of opportunities and challenges and the impact of climate change in individual daily work and in achieving sustainable blue economy from stakeholder perspectives | Germany             | [31]       |
| ’It’s not just about fish’: Assessing the social impacts of marine protected areas on the wellbeing of coastal communities in New South Wales. | 2020 | The impact of Marine Protected Area on the wellbeing of local communities. | Australia           | [32]       |
| Social and ecological outcomes of conservation interventions in tropical coastal marine ecosystems: a systematic map protocol. | 2020 | Identify articles that examine the ecological and social outcomes associated with conservation interventions in TCMEs; specifically in coral reef, mangrove, and seagrass habitat | Not Specified       | [33]       |
In order to identify the focus of study that are exist in 10 years period since 2010 until 2020, the articles are categorized into three groups which are assessment, policy & planning, and intervention. Summary of the article categorization are provided in table 2.

| Focus of study         | Title                                                                 | N  | %     |
|------------------------|-----------------------------------------------------------------------|----|-------|
| Assessment             | [23], (Schumacher et al., 2020), (Gollan et al., 2019),               | 6  | 54%   |
|                        | (Stacey et al., 2019), (Gollan & Barclay, 2020), (Hoerterer et al., 2020) |    |       |
| Policy & Planning      | [24], [27], [29], [30]                                                | 4  | 36%   |
| Intervention           | [33]                                                                  | 1  | 10%   |

The link between psychological wellbeing and sustainable development are identified by analyzing the variables that investigated in each of the study. The variables identification of each study are shown in table 3.

| Title                                                                 | Year | Variables                                           | References |
|-----------------------------------------------------------------------|------|-----------------------------------------------------|------------|
| Performance Indicator Framework for Evaluation of Sustainable Tourism in the Taiwan Coastal Zone | 2016 | Performance of Sustainable tourism                  | [23]       |
| Towards Sustainable Development of Coastal Fisheries Resources in Bangladesh: An Analysis of the Legal and Institutional Framework | 2017 | Policies that regulate the coastal fisheries resources | [24]       |
| Measuring and comparing the sustainability of coastal tourism destinations in Germany, Lithuania, and Indonesia | 2018 | Sustainable coastal tourism development             | [25]       |
| Maximising community wellbeing: Assessing the threats to the benefits communities derive from the marine estate | 2019 | Community wellbeing                                  | [26]       |
| A practical framework of quantifying climate change-driven environmental losses (QuantiCEL) in coastal areas in developing countries | 2019 | Monetary value of environmental losses               | [27]       |
| Enhancing coastal livelihoods in Indonesia: an evaluation of recent initiatives on gender, women and sustainable livelihoods in small-scale fisheries | 2019 | The role of gender                                   | [28]       |
| Sustaining Canadian marine biodiversity: Policy and statutory progress | 2020 | Marine biodiversity policy                           | [29]       |
| Planning island sustainable development policy based on the theory of ecosystem services: A case study of Zhoushan Archipelago, East China | 2020 | Policy and planning                                  | [30]       |
| Stakeholder Perspectives on Opportunities and Challenges in Achieving Sustainable Growth of the Blue Economy in a Changing Climate | 2020 | stakeholder perspectives of opportunities, challenges and the impact of climate change | [31]       |
| 'It’s not just about fish’: Assessing the social impacts of marine protected areas on the wellbeing of coastal communities in New South Wales | 2020 | The impact of Marine Protected Area and wellbeing of local communities ecological and social outcomes of conservation interventions | [32]       |
| Social and ecological outcomes of conservation interventions in tropical coastal marine ecosystems: a systematic map protocol | 2020 |                                                     | [33]       |

This research shows that there are a number of articles discuss about wellbeing or about sustainable development. However, there is no study that tried to linked between psychological wellbeing and
sustainable development that was found published in ten-year course. Beside of that, from the documents, it is found that articles in the context of wellbeing and sustainable development published during 2010-2020 were focused on policy and planning, assessment, and intervention.

4 Discussions
This review aims to identified the link between psychological wellbeing and sustainable development of coastal communities. The main finding of this research is that the relationship between psychological wellbeing and sustainable development was not found in between 2010 until 2020 in the two of the well-known databases namely Scopus and Web of Science.

The focus of the studies published during the year 2010-2020 could be categorized in three groups which are policy and planning, assessment, and intervention. None of the articles found in the databases that focus on the link between psychological wellbeing and sustainable development. In other word, it is shown that psychological wellbeing is still not yet considered in the indicators of coastal community sustainable development. Therefore, it is important to integrate psychological wellbeing as one of tool to assess sustainable development of coastal community in order to ensure the good health and wellbeing for all is achieved.

5 Conclusions
In conclusion, the study of the relationship between psychological wellbeing and sustainable development of coastal communities is still not yet found. Furthermore, psychological wellbeing is still not yet considered as part of the coastal communities’ sustainable development indicators. Therefore to warrant the good health and wellbeing for all is achieved, it is important to incorporate psychological wellbeing as part of the assessment tools to measured sustainable development of coastal community.

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Author Contribution
The articles were developed by the author herself and there is no other party that involved in the research.

Declaration of Conflicting Interests
The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

References
[1] F. Dragnet-Eckert, “The adaptive function of self-esteem: Autonomy and the growth-wellbeing motive,” New School for Social Research, Ann Arbor, 2001.
[2] A. R. Nair, S. Ravindranath, and J. Thomas, “Can Social Skills Predict Wellbeing?: An Exploration,” Eur. Acad. Res., vol. 1, no. 5, pp. 712-720, 2013.
[3] F. M. Morales-Rodríguez, I. Espigares-López, T. Brown, and J. M. Pérez-Mármol, “The relationship between psychological well-being and psychosocial factors in university students,” Int. J. Environ. Res. Public Health, vol. 17, no. 13, pp. 1-21, 2020, doi: 10.3390/ijerph17134778.
[4] K. W. Brown and R. M. Ryan, “The benefits of being present: mindfulness and its role in psychological well-being,” J. Pers. Soc. Psychol., vol. 84, no. 4, pp. 822-848, 2003.
[5] F. M. Sahu and S. Rath, “Self-efficacy and Wellbeing in Working and Non-working Women: The Moderating Role of Involvement,” Psychol. Dev. Soc., vol. 15, no. 2, pp. 187-200, Sep. 2003, doi: 10.1177/09713360301500205.
[6] M. Joshanloo, P. Rastegar, and A. Bakhshi, “The Big Five personality domains as predictors of social wellbeing in Iranian university students,” *J. Soc. Pers. Relat.*, vol. 29, no. 5, pp. 639–660, Aug. 2012, doi: 10.1177/0265407512443432.

[7] L. S. Palupi, “Psychological wellbeing of coastal communities in Surabaya: A preliminary study,” in *IOP Conference Series: Earth and Environmental Science*, 2021, vol. 649, no. 1, doi: 10.1088/1755-1315/649/1/012033.

[8] L. S. Palupi, “Psychological wellbeing of elderly people in Indonesia: Javanese psychological wellbeing perspective,” *Stud. Univ. Mold.*, vol. 9, no. 119, pp. 177–180, 2018.

[9] M. Taylor, S. Jenkins, and A. Sacker, “Financial capability, income and psychological wellbeing,” 18, 2011.

[10] S. Afsana, “a Study of Mental Health and Psychological Wellbeing among Teachers and Lecturers,” *Int. J. Indian Psychol.*, vol. 3, no. 3, pp. 32–38, 2016, [Online]. Available: http://isrj.org/UploadedData/8170.pdf.

[11] G. E. Coverdale and A. F. Long, “Emotional wellbeing and mental health: an exploration into health promotion in young people and families,” *Perspect. Public Health*, vol. 135, no. 1, pp. 27–36, Jan. 2015, doi: 10.1177/1757913914558080.

[12] M. Redshaw and O. Van Den Akker, “Maternal mental health and wellbeing,” vol. 6838, 2007, doi: 10.1080/02646830701669497.

[13] M. Redshaw, “Maternal health and wellbeing in the perinatal period,” University of Oxford, 2019. https://www.npeu.ox.ac.uk/research/maternal-health-and-wellbeing-in-the-perinatal-period-212.

[14] B. Mastropieri, “Psychological well-being and its effects on mental health and program outcome among homeless young adults,” Columbia University, 2016.

[15] D. Anggraini and L. Palupi, “Relationship between gratitude and psychological well-being around Lapindo Mudflow resident,” *E3S Web Conf.*, vol. 153, pp. 1–6, 2020, doi: 10.1051/e3sconf/202015303005.

[16] Nashich and L. S. Palupi, “The Relationship between Social Support and The Psychological Well-being of Students Who Work Part-time Tubagus,” *E3S Web Conf.*, vol. 202, 2020, doi: 10.1051/e3sconf/202020212027.

[17] M. P. Rachmadhani and L. S. Palupi, “The Relationship between Social Support and Psychological Well Being of Indonesian Rural to Urban Migrant University Students in Universitas Airlangga,” *E3S Web Conf.*, vol. 202, pp. 3–7, 2020, doi: 10.1051/e3sconf/202020212026.

[18] M. R. Saputra and L. S. Palupi, “Relationship between Social Support and Psychological Well-Being of the Final Year Students,” *E3S Web Conf.*, vol. 202, pp. 0–5, 2020, doi: 10.1051/e3sconf/202020212027.

[19] J. Cho, P. Martin, J. Margrett, M. MacDonald, and L. W. Poon, “The relationship between physical health and psychological well-being among oldest-old adults,” *J. Aging Res.*, vol. 2011, 2011, doi: 10.4061/2011/605041.

[20] A. McCloughen, K. Foster, D. Kerley, C. Delgado, and A. Turnell, “Physical health and well-being: Experiences and perspectives of young adult mental health consumers,” *Int. J. Ment. Health Nurs.*, vol. 25, no. 4, pp. 299–307, 2016, doi: 10.1111/inm.12189.

[21] Paperpile, “The top list of academic research databases,” *Paperpile*, 2020.

[22] D. Moher et al., “Preferred reporting items for systematic review and meta-analysis protocols (PRISMA-P) 2015 statement,” *Rev. Esp. Nutr. Humana y Diet.*, vol. 20, no. 2, pp. 148–160, 2016, doi: 10.1186/2046-4053-4-1.

[23] S. H. Wang, M. T. Lee, P. A. Château, and Y. C. Chang, “Performance indicator framework for evaluation of sustainable tourism in the Taiwan coastal zone,” *Sustain.*, vol. 8, no. 7, 2016, doi: 10.3390/su8070652.

[24] M. M. Shamsuzzaman, X. Xiangmin, Y. Ming, and J. N. Tania, “Towards Sustainable
Development of Coastal Fisheries Resources in Bangladesh: An Analysis of the Legal and Institutional Framework,” *Turkish J. Fish. Aquat. Sci.*, vol. 17, pp. 831–839, 2017, doi: 10.4194/1303-2712-v17.

[25] J. Schumacher et al., “Measuring and comparing the sustainability of coastal tourism destinations in Germany, Lithuania, and Indonesia,” *Environ. Dev. Sustain.*, vol. 22, no. 3, pp. 2451–2475, 2020, doi: 10.1007/s10668-018-00301-4.

[26] N. Gollan, M. Voyer, A. Jordan, and K. Barclay, “Maximising community wellbeing: Assessing the threats to the benefits communities derive from the marine estate,” *Ocean Coast. Manag.*, vol. 168, no. July 2018, pp. 12–21, 2019, doi: 10.1016/j.ocecoaman.2018.10.020.

[27] S. Mehvar, A. Dastgheib, T. Filatova, and R. Ranasinghe, “A practical framework of quantifying climate change-driven environmental losses (QuantiCEL) in coastal areas in developing countries,” *Environ. Sci. Policy*, vol. 101, no. February, pp. 302–310, 2019, doi: 10.1016/j.envsci.2019.09.007.

[28] N. Stacey et al., “Enhancing coastal livelihoods in Indonesia: an evaluation of recent initiatives on gender, women and sustainable livelihoods in small-scale fisheries,” *Marit. Stud.*, vol. 18, no. 3, pp. 359–371, 2019, doi: 10.1007/s40152-019-00142-5.

[29] J. A. Hutchings, J. K. Baum, S. D. Fuller, J. Laughren, and D. L. VanderZwaag, “Sustaining Canadian marine Biodiversity: Policy and statutory progress,” *Facets*, vol. 5, no. 1, pp. 264–288, 2020, doi: 10.1139/FACETS-2020-0006.

[30] H. Zhang and Y. Xiao, “Planning island sustainable development policy based on the theory of ecosystem services: A case study of zhoushan archipelago, east China,” *Isl. Stud. J.*, vol. 15, no. 1, pp. 237–252, 2020, doi: 10.24043/issj.105.

[31] C. Hoerterer, M. F. Schupp, A. Benkens, D. Nickiewicz, G. Krause, and B. H. Buck, “Stakeholder Perspectives on Opportunities and Challenges in Achieving Sustainable Growth of the Blue Economy in a Changing Climate,” *Front. Mar. Sci.*, vol. 6, no. January, pp. 1–12, 2020, doi: 10.3389/fmars.2019.00795.

[32] N. Gollan and K. Barclay, “ ‘It’s not just about fish’: Assessing the social impacts of marine protected areas on the wellbeing of coastal communities in New South Wales,” *PLoS One*, vol. 15, no. December, pp. 1–24, 2020, doi: 10.1371/journal.pone.0244605.

[33] W. R. Brooks et al., “Social and ecological outcomes of conservation interventions in tropical coastal marine ecosystems: A systematic map protocol,” *Environ. Evid.*, vol. 9, no. 1, pp. 1–12, 2020, doi: 10.1186/s13750-020-00193-w.