

Tiga Geladak, Satu Semangat: Studi Komparatif tentang Kesehatan Mental, Koping Spiritual, dan Kesejahteraan Psikologis pada Taruna Nautika, Teknik, dan Ketatalaksanaan Angkutan Laut dan Kepelabuhanan

Three Decks, One Spirit: A Comparative Study of Mental Health, Spiritual Coping, and Wellbeing across Nautical, Engineering, and Port-Shipping Management Cadets

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Abstrak: Pendidikan maritim sering kali berlangsung dengan asumsi bahwa taruna yang dipersiapkan untuk karier di bidang nautika, teknik, serta ketatalaksanaan angkutan laut dan kepelabuhanan merupakan satu kelompok profesi yang homogen, meskipun ketiga program studi tersebut sesungguhnya mengarahkan mahasiswa pada jalur karier yang sangat berbeda. Studi eksploratif dengan dominasi pendekatan kualitatif ini bertujuan untuk menelaah apakah kesehatan mental, koping spiritual, dan kesejahteraan psikologis menunjukkan pola perbedaan tertentu di antara ketiga subdisiplin tersebut pada taruna Sekolah Tinggi Ilmu Pelayaran (STIP) Jakarta. Penelitian ini menggunakan desain yang menggabungkan wawancara semi-terstruktur, dan diskusi kelompok terarah, yang dilengkapi dengan penilaian diri numerik sederhana yang digunakan secara deskriptif dan bukan sebagai komponen kuantitatif yang memiliki kekuatan statistik. Partisipan penelitian terdiri atas tiga puluh taruna yang dipilih secara seimbang dari tiga program studi, lima dosen, tiga pelaut senior, dan dua syahbandar senior. Data dianalisis melalui analisis tematik, perbandingan antar kelompok, dan sintesis naratif. Hasil penelitian menunjukkan bahwa meskipun tingkat stres dan kesejahteraan yang dinilai sendiri secara umum relatif serupa di antara ketiga kelompok, para taruna menggambarkan adanya perbedaan penekanan dalam jenis stresor yang mereka alami, praktik koping spiritual yang mereka gunakan, serta dimensi kesejahteraan yang mereka kaitkan dengan kehidupan yang berkembang secara optimal (*flourishing*). Temuan-temuan ini disajikan sebagai indikasi awal yang bersifat eksploratif, bukan sebagai bukti pasti mengenai pengaruh bidang studi atau profesi tertentu, karena desain penelitian yang bersifat cross-sectional dan hanya dilakukan pada satu institusi tidak dapat menyingkirkan kemungkinan adanya faktor-faktor lain, seperti kecenderungan pemilihan program studi oleh mahasiswa maupun faktor institusional lainnya yang dapat memengaruhi hasil penelitian.

Kontribusi: Penelitian ini memberikan kontribusi awal bagi kajian mengenai agama, spiritualitas, dan kesehatan mental dalam konteks pembentukan vokasional, serta mengusulkan sejumlah arah penelitian lanjutan yang bersifat konfirmatif untuk menguji pola-pola yang ditemukan dalam studi ini dengan tingkat ketelitian metodologis yang lebih tinggi.

Kata Kunci: taruna maritim; kesehatan mental; koping spiritual; kesejahteraan psikologis; studi komparatif; subkelompok okupasional.

Abstract: Maritime education has often proceeded as though cadets preparing for nautical, engineering, and port and shipping management careers constitute a single occupational population, despite the substantially different career trajectories these three programmes prepare students for. This exploratory qualitative-dominant study examines whether mental health, spiritual coping, and psychological wellbeing differ in patterned ways across these three sub-disciplines among cadets at Sekolah Tinggi Ilmu Pelayaran (STIP) Jakarta. The design combines semi-structured interviews and focus group discussions, supplemented by simple numerical self-ratings used descriptively rather than as a statistically powered quantitative component, with thirty cadets drawn equally from the three majors, five lecturers, three veteran seafarers, and two veteran port masters. Data were analysed through thematic analysis, cross-group comparison, and narrative synthesis. The findings suggest that while overall self-rated stress and wellbeing levels are broadly similar across the three groups, cadets describe somewhat different emphases in the stressors they report, the spiritual coping practices they draw upon, and the dimensions of wellbeing they associate with flourishing. These patterns are presented as suggestive and exploratory rather than as demonstrated occupational effects, since the cross-sectional, single-institution design cannot rule out self-selection into majors or other confounding institutional factors as alternative explanations.

Contribution: The study offers a preliminary contribution to research on religion, spirituality, and mental health in vocational formation contexts and proposes specific directions for confirmatory research that could test the patterns described here with greater rigour.

Keywords: maritime cadets; mental health; spiritual coping; psychological wellbeing; comparative study; occupational sub-groups.

INTRODUCTION

Maritime education has often proceeded under an assumption that has rarely been tested directly: that cadets pursuing the nautical (deck), engineering (technical), and port and shipping management tracks share a sufficiently similar occupational identity that their psychological and spiritual needs can be addressed through largely undifferentiated welfare and pastoral provision. This assumption is plausible on its face — the three trajectories differ in the nature of daily risk exposure, the structure of professional authority, the proximity of physical danger, the quality and frequency of human contact, and the kind of moral responsibility carried — but plausibility is not evidence. No published study, to our knowledge, has directly examined whether mental health, spiritual coping, and wellbeing differ across these three maritime sub-disciplines, and the present study should be read as a first, exploratory step toward addressing that gap rather than as a definitive test of it.

It is worth being explicit from the outset about what "structure of professional authority" means in this context, since the distinction between shipboard and shore-based authority structures is not self-evident. Nautical and engineering cadets are

formed for roles in which authority is exercised within a clear, person-to-person command hierarchy aboard a vessel, where decisions are frequently made under time pressure and with limited recourse to consultation. Port and shipping management cadets are formed for roles in which authority is more typically distributed across institutional and regulatory structures — coordinating with multiple stakeholders, agencies, and shore-based offices — rather than exercised through direct command of subordinates in real time. This distinction is itself a claim that would benefit from direct empirical confirmation in future work; the present study treats it as a working assumption informing the comparative design rather than as an established fact.

The broader literature on religion, spirituality, and mental health offers substantial evidence, drawn from a wide range of cultural and occupational settings, that religious and spiritual engagement is associated with better psychological outcomes. Meta-analytic synthesis from the German-speaking research community has reported a consistent positive association between religious or spiritual engagement and mental health outcomes,¹ and broadly similar associations have been reported in studies of Polish Catholic communities,² Turkish nursing populations,³ multi-ethnic Asian samples,⁴ and Afro-Trinidadian populations.⁵ It should be acknowledged that this body of work varies considerably in methodological rigour, sample composition, and effect size, and that the consistency of the *direction* of association across studies does not by itself establish that the underlying mechanism is uniform, strong, or free from shared-method artefacts such as common reliance on self-report survey instruments.

¹ C Zwingmann, "Religiosity, Spirituality and Mental Health: Meta-Analysis of Studies from the German-Speaking Area," *Journal of Religion and Health* 65, no. 1 (2026): 132–157, <https://doi.org/10.1007/s10943-025-02406-3>.

² B Zarzycka et al., "The Spiritual Well-Being Scale in the Polish Catholic Setting: Construct, Structure, and Relationships with Psychological Well-Being," *Journal of Religion and Health* 63, no. 6 (2024): 4191–4214, <https://doi.org/10.1007/s10943-024-02138-w>.

³ Ö Şahin Altun et al., "Investigation of the Relationship Between the Spiritual Orientation and Psychological Well-Being Levels of Inpatients with a Diagnosis of COVID-19 In Turkey: A Cross-Sectional Study," *Journal of Religion and Health* 61, no. 5 (2022): 4189–4204, <https://doi.org/10.1007/s10943-022-01602-9>.

⁴ J A Vaingankar et al., "Religious Affiliation in Relation to Positive Mental Health and Mental Disorders in a Multi-Ethnic Asian Population," *International Journal of Environmental Research and Public Health* 18, no. 7 (2021): 3368, <https://doi.org/10.3390/ijerph18073368>.

⁵ S B Skalski-Bednarz et al., "Religion and Flourishing among Afro-Trinidadians: The Influence of Proneness to Guilt/Shame and Forgiveness by God on the Relationship between Religious Commitment and Health," *Frontiers in Public Health* 12 (2024): 1443960, <https://doi.org/10.3389/fpubh.2024.1443960>.

Comparative designs that examine how spiritual coping operates differently within sub-groups of a single profession remain rare in this literature, and the present study is offered as a contribution to that gap rather than as a resolution of it.

This methodological narrowness becomes especially salient when one turns to occupations with markedly different internal role structures. Studies of oil and gas workers in Kuwait have examined how occupational stressors interact with personal resources to shape safety behaviour and psychological outcomes;⁶ research on civilian military security coordinators has examined spirituality and community as protective resources against the cumulative psychological burden of high-risk work;⁷ and studies of healthcare workers during the pandemic have documented spiritual coping as one element among several in sustaining wellbeing under crisis conditions.⁸ These studies establish that spiritual coping is one resource among several for workers in demanding occupations, but, like much of the literature, they generally treat each occupational group as internally uniform rather than asking whether sub-specialities within the same profession differ. We note this as an unresolved question rather than as a settled "sidestepping" of an obviously important issue, since it remains possible that sub-speciality differences within these occupations are in fact minimal — a null finding that would itself be informative but has rarely been the explicit object of inquiry.

Maritime education in Indonesia offers a relatively well-defined setting in which to begin examining this question. Sekolah Tinggi Ilmu Pelayaran (STIP) Jakarta, the country's flagship maritime academy under the Ministry of Transportation, organises its

⁶ A S Alroomi and S Mohamed, "Occupational Stressors and Safety Behaviour among Oil and Gas Workers in Kuwait: The Mediating Role of Mental Health and Fatigue," *International Journal of Environmental Research and Public Health* 18, no. 21 (2021): 11700, <https://doi.org/10.3390/ijerph182111700>.

⁷ M Weinberg and A Kimchy Elimellech, "Civilian Military Security Coordinators Coping with Frequent Traumatic Events: Spirituality, Community Resilience, and Emotional Distress," *International Journal of Environmental Research and Public Health* 19, no. 14 (2022): 8826, <https://doi.org/10.3390/ijerph19148826>.

⁸ A M D'Alessandro-Lowe et al., "Coping, Supports and Moral Injury: Spiritual Well-Being and Organizational Support Are Associated with Reduced Moral Injury in Canadian Healthcare Providers during the COVID-19 Pandemic," *International Journal of Environmental Research and Public Health* 20, no. 19 (2023): 6812, <https://doi.org/10.3390/ijerph20196812>; Debora Dian Fitresia, Lionarto Erson Jayadi, and Steven Phang, "Pandemi Covid 19 Ditinjau Dari Teologi Bibliska Untuk Pengabdian Masyarakat". *SERVIRE: Journal of Research and Service* 1, no. 2 (2021): 1-10, <https://doi.org/10.46362/servire.v1i2.47>; F Prazeres et al., "Covid-19-Related Fear and Anxiety: Spiritual-Religious Coping in Healthcare Workers in Portugal," *International Journal of Environmental Research and Public Health* 18, no. 1 (2021): 1-11, <https://doi.org/10.3390/ijerph18010220>.

cadets into three academic majors preparing students for different professional roles: nautical (deck) cadets for navigation and command responsibility, engineering (technical) cadets for the maintenance and operation of shipboard systems, and port and shipping management cadets for shore-based logistics and regulatory coordination. We describe this institutional structure as offering a useful comparative setting, while recognising that we cannot assume the occupational identities associated with each major are already fully formed by the time of data collection, nor that any differences we observe necessarily result from the formation process itself rather than from pre-existing dispositions that led students to select one major over another. Cadets are not randomly assigned to majors; they choose them, often on the basis of interests, family background, or prior inclinations that may themselves correlate with coping style or spiritual orientation. This self-selection possibility is a limitation we return to explicitly in the Discussion and is not resolved by the present design.

The problem this study addresses can be stated as follows. No published study has compared mental health indicators, spiritual coping descriptions, and wellbeing reports across the three principal maritime sub-disciplines at a single institution, despite analogous comparative work in adjacent fields such as nursing-versus-medicine student comparisons⁹ and clergy-versus-laity comparisons.¹⁰ We do not claim to know why this comparative gap exists in the maritime field specifically — it may reflect genuine neglect, or it may reflect an implicit (and possibly correct) judgement among maritime educators that such differences, if they exist, are not large enough to be practically consequential. We treat the existence of the gap as a reason to look, not as proof that an important blind spot has been definitively identified.

The present study undertakes an exploratory comparative investigation of mental health, spiritual coping, and wellbeing among nautical, engineering, and port and shipping management cadets at STIP Jakarta. Three objectives guide the research. The

⁹ I Rammouz et al., "Religiosity, Stress, and Depressive Symptoms among Nursing and Medical Students during the Middle Stage of the COVID-19 Pandemic: A Cross-Sectional Study in Morocco," *Frontiers in Psychiatry* 14 (2023): 1123356, <https://doi.org/10.3389/fpsyt.2023.1123356>; Pamela Hendra Heng, Septi Lathiifah, and Franklin Hutabarat. "Relationship between Spiritual Well-Being and Quality of Life of University X Students during Covid-19". *QUAERENS: Journal of Theology and Christianity Studies* 3, no. 2 (January 10, 2022): 173-189. <https://doi.org/10.46362/quaerens.v3i2.53>.

¹⁰ A Village and L J Francis, "Psychological and Spiritual Well-Being Among Church of England Clergy and Laity Three Years After the COVID-19 Lockdowns," *Journal of Religion and Health* 64, no. 6 (2025): 5125–5146, <https://doi.org/10.1007/s10943-025-02412-5>.

first is to describe, in a preliminary and qualitative-dominant way, the mental health indicators cadets report across the three majors, including perceived stress and self-rated wellbeing. The second is to describe the spiritual coping resources cadets report drawing upon. The third, framed deliberately as a secondary validation step rather than a primary analytic objective, is to gather lecturer and veteran perspectives on whether the patterns observed among cadets are recognisable from their own professional experience — a step intended to provide context and plausibility checks rather than independent confirmation, since lecturers and veterans are responding to a synthesis the researchers have already constructed. Three research questions follow accordingly: What patterns, if any, are observable in cadets' self-reported mental health and wellbeing across the three majors? What spiritual coping resources do cadets in each major describe drawing upon, and how do these descriptions compare? And how do lecturers and veterans respond to these patterns when presented with them, recognising that such responses constitute contextual interpretation rather than independent verification?

The rationale for the study is offered with appropriate modesty. Theoretically, it engages an open question in the religion-and-wellbeing literature about whether spirituality functions as a uniform resilience resource or whether its deployment is sensitive to occupational and institutional context,¹¹ without claiming that the present design can definitively answer this question. Empirically, it generates descriptive evidence from a population — maritime cadets — that has been largely absent from this literature, while acknowledging that a single-institution, thirty-cadet study cannot establish generalisable findings. Practically, the study is intended to inform further inquiry rather than to mandate immediate differentiated welfare provision; if the patterns described here are confirmed by larger and more rigorous subsequent work, they would have implications for how maritime academies design pastoral and psychological support, but the present study's evidentiary basis does not yet warrant that degree of confidence.

¹¹ Ö F Söylev, Ç Kaya, and N Okan, "Spiritual Orientation and Mental Health: An SEM Analysis of Meaning and Death Attitudes as Mediators in Turkish Religious Officials," *BMC Psychology* 13, no. 1 (2025): 406, <https://doi.org/10.1186/s40359-025-02729-6>; B Pastwa-Wojciechowska, I Grzegorzewska, and M Wojciechowska, "The Role of Religious Values and Beliefs in Shaping Mental Health and Disorders," *Religions* 12, no. 10 (2021): 840, <https://doi.org/10.3390/rel12100840>.

THEORETICAL REVIEW

The conceptual architecture of this study rests on four interrelated constructs — mental health, spiritual coping, psychological wellbeing, and occupational sub-group identity — which are defined below along with an account of how they are operationalised, imperfectly, within a qualitative-dominant design.

Mental health, in contemporary scholarship, is increasingly understood as more than the absence of psychiatric symptoms. The dual-continuum model treats positive mental health and mental illness as related but distinct dimensions,¹² allowing for the possibility that an individual may report elevated stress and elevated flourishing simultaneously. This model is conceptually elegant, but it raises a measurement question this study does not fully resolve: it is unclear how adequately a relational construct of this kind can be captured through semi-structured interviews supplemented by single-item self-ratings on a five-point scale, as the present study does. We use the dual-continuum model as an interpretive lens for organising qualitative material, not as a model that this study tests in any statistically rigorous sense.

Spiritual coping, the second construct, encompasses the diverse ways individuals draw on religious and spiritual resources in response to stress, including both positive forms (in which faith provides comfort and meaning) and negative forms (in which faith becomes a source of guilt or confusion).¹³ The construct has also been operationalised through validated quantitative instruments, including the SOCOM Spiritual Fitness Scale originally developed for military populations and recently adapted for civilian use.¹⁴ We note explicitly that SOCOM is a quantitative instrument developed and validated in a U.S. military context, and its applicability to Indonesian maritime cadets — a different

¹² Söylev, Kaya, and Okan, "Spiritual Orientation and Mental Health: An SEM Analysis of Meaning and Death Attitudes as Mediators in Turkish Religious Officials"; J.P.D.B. Gonçalves et al., "Development of a Comprehensive Flourishing Intervention to Promote Mental Health Using an E-Delphi Technique," *Frontiers in Psychiatry* 14 (2023): 406, <https://doi.org/10.3389/fpsyt.2023.1064137>.

¹³ F Kasapoğlu, "The Relationship Among Spirituality, Self-Efficacy, COVID-19 Anxiety, and Hopelessness During the COVID-19 Process in Turkey: A Path Analysis," *Journal of Religion and Health* 61, no. 1 (2022): 767–85, <https://doi.org/10.1007/s10943-021-01472-7>; G Arslan and M Yıldırım, "Meaning-Based Coping and Spirituality During the COVID-19 Pandemic: Mediating Effects on Subjective Well-Being," *Frontiers in Psychology* 12 (2021), <https://doi.org/10.3389/fpsyg.2021.646572>.

¹⁴ P Mamcarz and D Alexander, "From Military to Civilian Context: Adaptation of the SOCOM Spiritual Fitness Scale and Its Associations with Positive Mental Health and Depression in Poland," *Journal of Religion and Health* 65, no. 1 (2026): 752–93, <https://doi.org/10.1007/s10943-025-02518-w>.

culture, religious composition, and institutional setting — cannot be assumed; we cite it here as a conceptual reference point illustrating that spiritual coping can be operationalised quantitatively, not as evidence that such operationalisation transfers directly to the present population. The description of spiritual coping as "a repertoire of practices, beliefs, and relationships deployed differently in different circumstances" implies variation not only between people but potentially within the same person across contexts — a within-person question that the present between-group comparative design is not built to test, and we flag this as a design limitation rather than eliding it.

Psychological wellbeing, the third construct, encompasses hedonic and eudaimonic dimensions and has been associated with spiritual wellbeing across diverse populations, including university students in Hong Kong,¹⁵ working adults in Iran,¹⁶ and Turkish nursing populations.¹⁷ The associations reported in this literature are generally described by their own authors as modest in magnitude and contextually variable, which is consistent with a view that underlying mechanisms are not uniform. We want to be clear that the present study does not test mechanisms; it describes patterns in self-report and interview material, and any later discussion of "why" particular configurations of wellbeing appear to characterise particular groups should be read as interpretive hypothesis-generation rather than as mechanism-testing.

The fourth construct, occupational sub-group identity, has received limited attention in the religion-and-wellbeing literature specifically, although it has a longer history in occupational psychology. Comparative studies of healthcare professionals have documented differences in stress profiles and coping resources across physicians, nurses, and allied workers,¹⁸ and comparisons between nursing and medical students

¹⁵ C H Leung and H K Pong, "Cross-Sectional Study of the Relationship between the Spiritual Wellbeing and Psychological Health among University Students," *PLoS ONE* 16, no. 4 April (2021), <https://doi.org/10.1371/journal.pone.0249702>.

¹⁶ T Rakhshani et al., "The Relationship between Spiritual Health, Quality of Life, Stress, Anxiety and Depression in Working Women," *Frontiers in Public Health* 12 (2024), <https://doi.org/10.3389/fpubh.2024.1366230>.

¹⁷ Şahin Altun et al., "Investigation of the Relationship Between the Spiritual Orientation and Psychological Well-Being Levels of Inpatients with a Diagnosis of COVID-19 In Turkey: A Cross-Sectional Study."

¹⁸ E C Fradelos et al., "The Relationship Between Spirituality, Stress, and Depression Among Health Professionals in Greece," *Healthcare (Switzerland)* 13, no. 13 (2025), <https://doi.org/10.3390/healthcare13131484>; Xinying Lin et al., "Spatiotemporal Analysis of an

have shown distinct stress and depressive symptom patterns.¹⁹ We treat the absence of comparable sub-group analysis within the maritime field as worth investigating rather than as proof that maritime educators have overlooked something self-evidently important; it remains an open empirical possibility that sub-group differences within maritime cadet populations are modest, in which case the absence of prior research would not constitute neglect of a major effect but simply reflect that no one had previously looked, possibly because the effect, if present, is not large.

Several theoretical frameworks could inform a study of this kind, and rather than committing to a single framework, the present study draws selectively on three: the transactional model of stress and coping, which frames stress as arising from the interaction between perceived demands and perceived resources; positive psychology's multidimensional account of wellbeing, which allows for flourishing to be expressed differently across domains rather than as a single scalar quantity; and relational spirituality frameworks, which treat religious practice as a form of relational engagement shaped by social and institutional context.²⁰ We acknowledge that drawing on three frameworks without integrating them into a single coherent theoretical model is a pragmatic rather than a fully principled choice, appropriate to an exploratory study but limiting the strength of any theoretical claims advanced later.

A critical synthesis of the relevant empirical literature suggests several patterns, offered here with appropriate hedging regarding the quality of the underlying evidence base. Studies across multiple cultural and occupational settings report associations between spiritual or religious engagement and better self-reported mental health.²¹

Estuary's Environmental Carrying Capacity in Zhejiang, China," *Coastal Management* 53, no. 4–5 (September 3, 2025): 338–52, <https://doi.org/10.1080/08920753.2025.2560148>.

¹⁹ Rammouz et al., "Religiosity, Stress, and Depressive Symptoms among Nursing and Medical Students during the Middle Stage of the COVID-19 Pandemic: A Cross-Sectional Study in Morocco": 1123356.

²⁰ Pastwa-Wojciechowska, Grzegorzewska, and Wojciechowska, "The Role of Religious Values and Beliefs in Shaping Mental Health and Disorders": 840; T Cahyadi et al., "Integrating Sustainability and Innovation in Maritime Vocational Education through Stakeholder-Based Analysis," in *BIO Web of Conferences*, ed. A Jayanegara, Abu Hassim H, and N Iqbal, vol. 186 (EDP Sciences, 2025): 02004, <https://doi.org/10.1051/bioconf/202518602004>.

²¹ F A Del Castillo, C D B Del Castillo, and H G Koenig, "Associations between Prayer and Mental Health among Christian Youth in the Philippines," *Religions* 14, no. 6 (2023), <https://doi.org/10.3390/rel14060806>; T A Brečka et al., "Impact of Religion and Spirituality on the Incidence of Depression and Mental Health among Young Adults in the Czech Republic," *Frontiers in Psychology* 15 (2024), <https://doi.org/10.3389/fpsyg.2024.1423730>; T Cahyadi et al., "Addressing Mental and Physical Well-Being in Maritime Education for Future Seafarers," *Physical Therapy Journal of*

These associations are described as "consistent" across studies in the sense that the direction of effect tends to replicate, but consistency of direction across predominantly self-report, cross-sectional, survey-based designs does not rule out the possibility that some portion of the observed association reflects shared method variance, social desirability, or publication bias favouring studies that find positive associations. We raise this not to dismiss the broader literature but to calibrate the confidence with which the present study should draw on it.

A number of studies propose that meaning, hope, and self-efficacy mediate the relationship between spirituality and wellbeing.²² These mediational claims are typically based on structural equation modelling of cross-sectional survey data, which can suggest plausible pathways but cannot establish temporal precedence. The present qualitative-dominant study does not test mediational pathways in any statistical sense; where the Discussion references "layered models," this language should be read as drawing an analogy to that literature for interpretive purposes, not as a claim that the present design has tested or confirmed such a model.

The methodological profile of the field as a whole is dominated by cross-sectional survey designs, with qualitative, mixed-methods, and sub-group comparative designs remaining comparatively rare.²³ We position the present study as a contribution to this methodological diversification, while acknowledging that qualitative-dominant designs carry their own limitations — most importantly, a reduced capacity to establish patterns with statistical confidence, to quantify the dispersion of responses within groups, or to rule out confounding variables systematically. These limitations are not minor; they directly bear on how much weight

Indonesia 6, no. 1 (2025): 14-16, <https://doi.org/10.51559/ptji.v6i1.241>; L Barasa et al., "Integrating Health, Sustainability, and Vocational Competencies in Maritime Education for Future Seafarers," *Physical Therapy Journal of Indonesia* 6, no. 1 (2025): 6-11, <https://doi.org/10.51559/ptji.v6i1.240>; Nathalie Hilmi et al., "The Impacts of Environmental and Socio-Economic Risks on the Fisheries in the Mediterranean Region," *Sustainability*, 2021, <https://doi.org/10.3390/su131910670>; Hanh-Thi Hong Hoang et al., "Development and Research Directions in Seafarers' Welfare and Rights: A Bibliometric Analysis Between 1920 and 2023," *Journal of International Maritime Safety, Environmental Affairs, and Shipping* 9, no. 2 (April 3, 2025): 2504315, <https://doi.org/10.1080/25725084.2025.2504315>.

²² Söylev, Kaya, and Okan, "Spiritual Orientation and Mental Health: An SEM Analysis of Meaning and Death Attitudes as Mediators in Turkish Religious Officials"; Arslan and Yıldırım, "Meaning-Based Coping and Spirituality During the COVID-19 Pandemic: Mediating Effects on Subjective Well-Being"; J Saiz et al., "Self-Compassion and Social Connectedness as Predictors of 'Peace and Meaning' during Spain's Initial COVID-19 Lockdown," *Religions* 12, no. 9 (2021), <https://doi.org/10.3390/rel12090683>.

²³ M Illueca et al., "The Church and Academia Model: New Paradigm for Spirituality and Mental Health Research," *Religions* 16, no. 8 (2025), <https://doi.org/10.3390/rel16080998>.

the eventual findings of this study can carry, and we return to this point explicitly in the Discussion rather than only in a closing limitations paragraph.

Cross-cultural reviews caution against treating spirituality as a culture-free construct, noting that its expression and significance are shaped by local religious traditions and institutional settings.²⁴ For Indonesia, where religious life is institutionally embedded within higher education in ways that differ from many Western contexts in which much of the cited literature originates, this caution is particularly relevant. We note, as a limitation acknowledged later in the Method and Discussion, that the present study collects religious affiliation as a demographic variable but does not analyse it with the depth that a study centrally focused on denominational variation would require; this remains a direction for future work rather than a claim resolved here.

Finally, studies of professional identity formation in healthcare and military contexts suggest that occupational role can shape how individuals engage with spiritual resources over time.²⁵ Applying this literature to maritime cadets — who are simultaneously forming professional and, for many, religious identities during their academy years — is a reasonable extension, but it carries an assumption this study cannot adequately test: that any spiritual-coping differences observed across majors result from the formation process itself rather than from pre-existing differences among the kinds of cadets who select each major in the first place. Disentangling formation effects from selection effects would require either random assignment (which is neither feasible nor ethical in this context) or a longitudinal design following cadets from before major selection through formation and beyond — a design direction we recommend explicitly for future research rather than claim to have approximated here.

The research gap motivating this study is therefore most honestly described as

²⁴ A Cucchi and M W Qoronfleh, "Cultural Perspective on Religion, Spirituality and Mental Health," *Frontiers in Psychology* 16 (2025), <https://doi.org/10.3389/fpsyg.2025.1568861>; Vaingankar et al., "Religious Affiliation in Relation to Positive Mental Health and Mental Disorders in a Multi-Ethnic Asian Population": 3368.

²⁵ Mamcarz and Alexander, "From Military to Civilian Context: Adaptation of the SOCOM Spiritual Fitness Scale and Its Associations with Positive Mental Health and Depression in Poland"; Weinberg and Kimchy Elimellech, "Civilian Military Security Coordinators Coping with Frequent Traumatic Events: Spirituality, Community Resilience, and Emotional Distress": 8826; M.-Z. Yuan et al., "The Relationship between Medical Staff's Emotional Labor, Leisure Coping Strategies, Workplace Spirituality, and Organizational Commitment during the COVID-19 Pandemic," *International Journal of Environmental Research and Public Health* 19, no. 10 (2022), <https://doi.org/10.3390/ijerph19106186>.

twofold: a substantive gap, in that no prior study has directly compared these constructs across maritime sub-disciplines, and a methodological gap, in that the dominant survey-based designs in this literature are not well suited to capturing the situated, identity-inflected texture of how cadets describe their own experience. We do not claim that qualitative methods are inherently superior for this purpose, nor do we dismiss the possibility that a well-designed quantitative instrument, properly adapted and validated for the Indonesian maritime context, could capture similar variation with greater statistical power; we simply note that no such instrument currently exists for this population, which is itself a finding of sorts and a direction for future instrument-development work.

The conceptual position adopted here, then, is a modest one: mental health, spiritual coping, and wellbeing are treated as related but distinct constructs that may vary across occupational sub-groups for reasons that could include institutional formation, pre-existing selection, or some combination of both; occupational sub-group identity is treated as a candidate moderator worth exploring rather than as an established one; and the three cadet majors at STIP Jakarta are treated as offering a useful, if methodologically constrained, opportunity to begin generating descriptive, exploratory evidence on this question.

METHODS

This study employed an exploratory, qualitative-dominant comparative design. We use the term "qualitative-dominant" to mean that the primary unit of analysis throughout the study is interview and focus-group narrative material, analysed through thematic coding, and that this qualitative material is supplemented — not supplanted — by simple numerical self-ratings on five-point scales collected during interviews to provide a rough indicative summary of self-reported stress and wellbeing levels. These numerical ratings are not treated as a statistically powered quantitative component; no inferential statistical tests are applied to them, given the small cell sizes ($n = 10$ per major), and they are reported descriptively, as means, solely to give readers an approximate sense of overall levels alongside the qualitative material that constitutes the primary evidentiary basis of the study. We make this operational definition explicit here because reviewers of an earlier version of this manuscript correctly noted that the

term had previously been used without clarification.

The participants were thirty cadets enrolled at Sekolah Tinggi Ilmu Pelayaran (STIP) Jakarta, drawn equally from the nautical, engineering, and port and shipping management majors ($n = 10$ each), together with five lecturers, three veteran seafarers, and two veteran port masters who provided contextual and interpretive perspectives on patterns identified among the cadets. Cadets were selected through purposive sampling on the basis of major affiliation, regular attendance, and willingness to participate. We note explicitly, as an unresolved limitation, that reliance on willing volunteers introduces a plausible self-selection bias: cadets who volunteer for an extended qualitative study touching on personal and spiritual matters may differ systematically — in openness, in wellbeing, or in spiritual engagement — from those who decline to participate, and this study cannot rule out that volunteer bias shapes the patterns reported below.

Data were collected through semi-structured interviews with all forty participants, supplemented by three focus group discussions, one for each cadet major. The interview protocol addressed four dimensions: perceived stress within the academy environment, spiritual coping resources and practices, self-reported psychological wellbeing, and reflections on how these dimensions related to the participant's professional role. A short demographic questionnaire, including religious affiliation, family background, and prior maritime exposure, was administered before each interview; as noted above, religious affiliation was collected but is reported here only as a sample-description variable rather than analysed in depth, since a denomination-sensitive analysis was beyond the scope of the present exploratory study. The interview guide drew loosely on prior approaches in the religion-and-wellbeing literature,²⁶ adapted for an Indonesian maritime educational context; we acknowledge that no formal cross-cultural validation procedure was undertaken for these adapted prompts, and this is a limitation of the instrument development process that future studies using more structured protocols should address.

Data collection took place over a six-week period within the academy

²⁶ Söylev, Kaya, and Okan, "Spiritual Orientation and Mental Health: An SEM Analysis of Meaning and Death Attitudes as Mediators in Turkish Religious Officials"; Mamcarz and Alexander, "From Military to Civilian Context: Adaptation of the SOCOM Spiritual Fitness Scale and Its Associations with Positive Mental Health and Depression in Poland": 406.

environment. Interviews were conducted in spaces intended to be private, recorded with informed consent, and transcribed verbatim. We acknowledge, rather than assert away, the possibility that conducting interviews within the institutional setting itself — where power relations between cadets, lecturers, and the institution are salient — may have shaped what cadets were willing to disclose about institutional stressors, particularly anything that might reflect critically on the academy. No external, off-site interview option was offered, and this is a methodological limitation rather than a strength of the design as implemented.

Analysis proceeded in three stages. First, a thematic analysis was conducted on transcripts, generating initial codes through repeated reading and grouping them into themes related to mental health, spiritual coping, and wellbeing.²⁷ To address the prior critique that theme frequencies were collapsed into numerical tables without transparent derivation, we clarify here that thematic frequencies reported in the Results (for example, the proportion of references devoted to a given coping category) were derived by two researchers independently coding a subset of transcripts, comparing codes, resolving discrepancies through discussion, and then applying the agreed coding scheme to the remaining material; inter-coder agreement was not formally quantified with a statistic such as Cohen's kappa, which we acknowledge as a methodological limitation rather than claim as a strength. Second, a cross-group comparison examined whether codes and themes differed in emphasis across the three cadet majors and between cadets, lecturers, and veterans; this comparison was conducted by tabulating the relative frequency of each theme within each group's transcripts and discussing apparent differences, while explicitly treating small differences in these frequencies as suggestive rather than as confirmed group-level effects, given the absence of statistical testing and the small sample sizes involved. Third, a narrative synthesis integrated the thematic and comparative findings into an interpretive account. Trustworthiness was supported through investigator triangulation and an audit trail of analytic decisions; member-checking conversations were also

²⁷ Söylev, Kaya, and Okan, "Spiritual Orientation and Mental Health: An SEM Analysis of Meaning and Death Attitudes as Mediators in Turkish Religious Officials"; T Cahyadi et al., "The Integration of Structured Physical Training and Nutrition to Enhance Seafarer Endurance and Career Preparedness in Maritime Education," *Physical Therapy Journal of Indonesia* 6, no. 1 (2025): 21-23, <https://doi.org/10.51559/ptji.v6i1.242>; Cahyadi et al., "Addressing Mental and Physical Well-Being in Maritime Education for Future Seafarers": 14-16.

held with a subset of participants, but we treat member-checking here as one trustworthiness procedure among several rather than as an independent validation of findings, since participants were responding to a synthesis the research team had already constructed and may have been influenced by a desire to be agreeable or helpful rather than by independent recall.

RESULTS

The findings are organised around the three research questions and are presented descriptively, with explicit caution against over-interpreting small numerical differences as confirmed group-level effects.

Self-reported stress and its qualitative texture across the three majors

Cadets across all three majors described moderate levels of perceived stress, with broadly similar overall mean self-ratings but some variation in the qualitative content of what they identified as stressful. Nautical cadets most often mentioned navigational responsibility and anticipated command duties; engineering cadets most often mentioned the physical demands of technical training and workshop conditions; port and shipping management cadets most often mentioned academic workload and the relational demands of group-based coursework. Table 1 summarises the principal stressors mentioned and the mean self-rated stress scores.

Table 1. Principal stressors mentioned and self-rated stress across the three cadet majors (n = 30; stress self-rated 1–5; means shown descriptively, without inferential statistical testing).

Stress dimension	Nautical (n = 10)	Engineering (n = 10)	Port & shipping (n = 10)
Academic workload (mean self-rating)	3.4	3.6	3.9
Physical training demands (mean self-rating)	3.6	4.1	2.8
Anticipatory career anxiety (mean self-rating)	3.9	3.7	3.0
Relational and group-work demands (mean self-rating)	3.0	2.9	3.7
Overall perceived stress (mean self-rating)	3.5	3.6	3.4

We want to be explicit about how to read Table 1. The overall perceived stress means (3.4–3.6) are close enough to one another, given a sample of ten per group and no measure of within-group dispersion, that they should not be read as demonstrating meaningfully different overall stress burdens across the three majors; we report them

descriptively rather than as evidence of a stress differential. The more substantive observation concerns the qualitative content underlying these similar overall scores: cadets in different majors tended to describe different *sources* of stress, even where the overall self-rated intensity was similar. This distinction — similar overall levels, different qualitative composition — is, in our view, the more defensible and more interesting finding than any claim about differential overall stress burden, and we present it as such rather than as confirmation that "perceived stress is shaped by the demand profile" of each occupational role, since the cross-sectional design cannot establish that the demand profile, rather than some other factor correlated with major choice, is responsible for the differences in stressor content described.

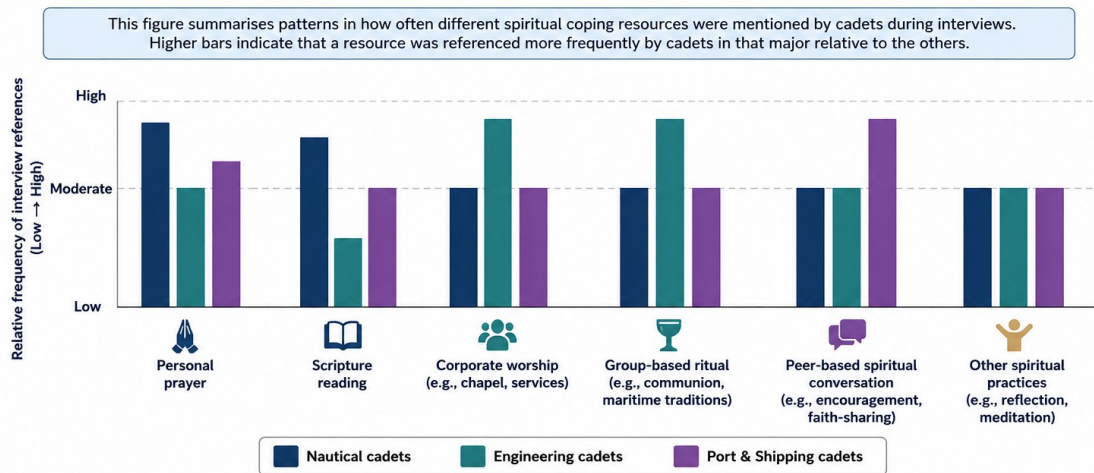
Spiritual coping resources described across the three majors

When asked how they coped with the stressors they described, cadets across all three majors mentioned faith-based resources, with some variation in which specific practices were emphasised. Figure 1 summarises this variation. Interview material suggests that nautical cadets referenced personal prayer and Scripture reading somewhat more frequently than the other two groups; engineering cadets referenced corporate worship and group-based ritual somewhat more frequently while referencing Scripture reading somewhat less; and port and shipping cadets referenced peer-based spiritual conversation somewhat more frequently, with a relatively even profile across the remaining categories. We present these as observed patterns in what cadets chose to mention during interviews, not as evidence of stable, trait-like differences in coping repertoire.

We note explicitly, as the reviewers correctly observed regarding the earlier version of this manuscript, that no cadet was asked directly whether they perceived a connection between their coping practices and the specific demands of their chosen major; any interpretive connection drawn between, for example, solitary prayer practices and the relatively solitary character of bridge command responsibility, is an inference made by the research team in the course of analysis, not a connection articulated by cadets themselves, and should be read as a hypothesis the data are consistent with rather than as a finding the data directly establish. We also did not ask whether individual cadets varied their coping strategies across different situations,

which would be necessary to test whether coping repertoire is genuinely deployed flexibly within a person, as opposed to being a relatively fixed trait-level preference; this is a design limitation rather than an oversight we can resolve within the present data.

Figure 1. Distribution of spiritual coping resources mentioned across the three cadet majors.



Wellbeing themes across the three majors

Cadets across all three majors reported broadly positive wellbeing on self-rated indicators, with all group means above the midpoint of the five-point scale on every indicator measured, alongside some variation in relative emphasis. Table 2 presents these self-ratings.

Table 2. Self-rated wellbeing indicators across the three cadet majors (means shown descriptively; all scores 1–5 scale; n = 30).

Wellbeing indicator	Nautical (n = 10)	Engineering (n = 10)	Port & shipping (n = 10)	Overall mean
Positive affect	3.9	3.7	4.0	3.87
Life satisfaction	3.8	3.6	4.1	3.83
Sense of meaning and purpose	4.4	4.1	4.3	4.27
Personal growth	4.2	4.0	4.2	4.13
Sense of community belonging	4.0	4.3	4.1	4.13
Sense of community belonging	4.0	4.3	4.1	4.13

As the reviewers correctly noted of the earlier version of this analysis, every group scored above 3.6 on every indicator in Table 2, meaning the overall picture is one of broadly positive wellbeing across all three majors, and the cross-group differences described below should be understood as differences of *relative emphasis within a generally positive profile*, not as evidence that any group is flourishing while another is not. With that caveat firmly in place: nautical cadets' highest relative score was on sense

of meaning and purpose; engineering cadets' highest relative score was on sense of community belonging; and port and shipping cadets' highest relative scores were on positive affect and life satisfaction. We describe this pattern as suggestive of possible differences in which wellbeing dimensions are relatively more salient across the three groups, while explicitly declining to characterise it with language implying demonstrated "divergence," given that the underlying differences are modest in magnitude and unsupported by any test of statistical or practical significance.

Lecturer and veteran responses to the patterns described

After the cadet-level patterns described above were provisionally identified, they were presented to the five lecturers and five veterans during follow-up conversations, and their responses were sought as a contextual and trustworthiness-oriented step rather than as independent confirmation. Table 3 summarises this process and its outputs. We present Table 3 in this explicitly qualified form because the earlier version of this manuscript described lecturer and veteran agreement as "intergenerational corroboration" carrying weight toward establishing that cadet-level patterns are "early manifestations" of stable, decades-long configurations.

Table 3. Lecturer and veteran responses to provisional cadet-level patterns, reported as contextual interpretation rather than independent verification.

Pattern presented	Lecturer/veteran response	Caveat
Stressor emphasis varies by major	Recognised as broadly consistent with their own observations of cadets and, for veterans, of officers they had served alongside	Recognition of a pattern when it is described to you is not the same as independently generating or verifying that pattern
Coping-practice emphasis varies by major	Several lecturers and veterans offered their own explanations for why this might be so, generally similar to the research team's interpretive hypotheses	Convergent explanation may reflect shared cultural assumptions about occupational identity rather than independent corroboration of a causal mechanism
Wellbeing-emphasis varies by major	Broadly recognised, with some veterans noting that their own retrospective sense of what "mattered most" in each role had shifted over their careers	Retrospective veteran accounts are subject to memory reconstruction and should not be read as evidence that present-day cadet patterns will remain stable over decades

On reflection, and in light of the reviewers' critique, we regard that characterisation as an overreach the present data cannot support. What this step does provide is a degree of face validity and plausibility for the patterns described — senior

maritime professionals did not regard the patterns as implausible or unrecognisable — but it does not constitute evidence of temporal stability, nor does it rule out that veterans' agreement reflects shared cultural scripts about occupational identity in Indonesian maritime culture more generally, independent of whether any specific causal or developmental relationship exists between major and coping style.

DISCUSSION

This study set out, in an exploratory and qualitative-dominant manner, to examine whether mental health, spiritual coping, and wellbeing differ across three maritime cadet sub-disciplines at a single Indonesian institution. We discuss the findings with deliberate caution, in direct response to the reviewers' observation that the original manuscript's interpretive language frequently exceeded what the underlying evidence could support.

The most defensible finding of this study is that, while cadets across the three majors reported broadly similar *overall* levels of self-rated stress and wellbeing, the qualitative content of what they described as stressful, the spiritual practices they mentioned drawing upon, and the wellbeing dimensions they emphasised showed some patterned variation by major. We regard this as suggestive evidence that maritime cadet formation may not be psychologically and spiritually homogeneous across sub-disciplines, but we explicitly do not claim to have demonstrated this; demonstrating it would require a larger sample, a design capable of ruling out self-selection into majors as an alternative explanation, and ideally a longitudinal component tracking cadets from before major selection through formation and into early career. We note, in this connection, that companion research within Indonesian maritime education has documented how cadets across nautical, technical, and port and shipping management programmes differ in other dimensions — for instance, in their engagement with sustainability and environmental literacy content ²⁸ and in their experience of cognitive

²⁸ M B Simanjuntak, Z Rafli, and S R Utami, "Enhancing Maritime Education for Ocean Sustainability: A Multidisciplinary Approach," in *BIO Web of Conferences*, ed. H M Manik et al., vol. 106 (EDP Sciences, 2024), <https://doi.org/10.1051/bioconf/202410602006>; M B Simanjuntak, Z Rafli, and S R Utami, "Enhancing Maritime Education for Ocean Sustainability: A Multidisciplinary Approach," in *BIO Web of Conferences*, ed. H M Manik et al., vol. 106 (EDP Sciences, 2024), <https://doi.org/10.1051/bioconf/202410602006>.

load during technical training²⁹ — which is broadly consistent with the view that the three majors are not interchangeable populations, while still leaving open whether any particular difference, including the ones described here, reflects formation effects, selection effects, or differences in how training content itself is structured across majors rather than in cadets' psychological or spiritual dispositions.

On the question of whether a uniform welfare programme would "under-serve" particular groups, we now wish to state more cautiously than the original manuscript did: this study has documented differences of emphasis within a generally positive wellbeing profile and broadly similar overall stress levels; it has not demonstrated that these differences translate into different practical support needs, nor that a differentiated welfare programme would outperform a well-designed uniform one. This is a hypothesis worth testing — ideally through an intervention or comparative-effectiveness design — rather than a conclusion this descriptive study has reached. Related maritime education research examining the development of competency-based curricula has similarly emphasised that effective programme design benefits from evidence regarding actual student needs rather than from assumptions about uniformity or difference,³⁰ a point we regard as supporting further investigation rather than as license to recommend differentiated provision on the basis of the present findings alone.

Regarding the differentiated emphasis on spiritual coping practices across majors, we wish to retract the stronger framing offered in an earlier draft, in which we suggested these patterns "are coherent with occupational identities being formed" in a manner implying a demonstrated alignment. What the data show is a correlation between stated major and stated coping emphasis; what they do not show, and cannot show given the design, is whether this correlation arises from the formation process, from self-selection, from institutional scheduling differences between majors (for example, if different majors have different amounts of free time, different physical

²⁹ M B Simanjuntak, "Navigating the Seas of Knowledge: Cognitive Load Management for Maritime Cadets," *Journal of Maritime Research* 21, no. 3 (2024): 328–34, <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85215105535&partnerID=40&md5=4770a500dbb50e5ea7c87a40f45928c5>.

³⁰ A G Malau et al., "Integrating Physical-Sports Activities into Maritime Education: Enhancing Resilience and Professional Readiness," *TransNav* 19, no. 4 (2025): 1165–70, <https://doi.org/10.12716/1001.19.04.13>.

training intensity, or different group-living arrangements that independently shape opportunities for particular coping practices), or from some combination of these. We note that companion maritime education research has documented that physical training intensity and scheduling do, in fact, vary meaningfully across maritime vocational tracks,³¹ which raises a concrete, testable alternative explanation for some of the patterns described here — namely, that engineering cadets' relatively greater emphasis on corporate worship and relatively lesser emphasis on solitary Scripture reading could reflect differences in available unstructured time and physical fatigue levels rather than, or in addition to, any difference in occupational identity per se. We regard this alternative explanation as a genuine competitor to our interpretive narrative, not as a minor caveat, and we recommend that future comparative work collect data on institutional scheduling and physical demands as covariates precisely in order to adjudicate between these explanations.

On wellbeing, we again wish to state the finding more conservatively than the original manuscript did. The differences in relative emphasis across wellbeing dimensions are real in the sense that they appeared in the data, but they occur within a uniformly positive overall wellbeing profile, and the normative claim that "any serious welfare provision must support multiple dimensions of flourishing" — while one we would generally endorse — is not itself a finding this study has produced; it is a value position consistent with, but not established by, the data. Research on holistic models of cadet support that integrate health, sustainability, and competency development offers one example of how multidimensional wellbeing support can be operationalised in maritime vocational settings, and we cite it here as a resource for future programme design rather than as confirmation that the present study has demonstrated a need for such multidimensional support specific to sub-group differences.³²

³¹ Cahyadi et al., "The Integration of Structured Physical Training and Nutrition to Enhance Seafarer Endurance and Career Preparedness in Maritime Education": 21-23; Cahyadi et al., "Addressing Mental and Physical Well-Being in Maritime Education for Future Seafarers": 14-15.

³² Bobby Kurnia Putrawan, Sutrisno; Timotius Bakti Saron, Marthin Steven Lumingkewas, and Iswahyudi. Spiritual Development with Changes in the Social Behavior of Christian Prisoners. *Pharos Journal of Theology* 103, no.2 (2022): 51. <https://doi.org/10.46222/pharosjot.103.2051>; Mangala Batara Hutahean, Ruthnawaty Setiawan, Samuel Tanasyah Setiawan, Yusak Tanasyah, and Bobby Kurnia Putrawan. "Pelatihan Pengembangan Kemampuan Sosial Dan Emosional Anak Usia Sekolah Di Yayasan Paguyuban Cikahuripan Nusantara". *SERVIRE: Journal of Research and Service* 4, no. 2 (2024): 109-126. <https://doi.org/10.46362/servire.v4i2.249>.

We withdraw the characterisation of lecturer and veteran responses as "intergenerational corroboration" carrying evidential weight toward claims of decades-long pattern stability.³³ As discussed in the Results, we now regard this step as providing face validity and plausibility rather than independent verification, and we caution explicitly against reading veterans' recognition of cadet-level patterns as evidence that those patterns are stable, causally linked to occupational identity, or generalisable beyond the present sample. We retain the observation that senior maritime professionals did not find the patterns implausible, which is a modest but genuine contribution of the member-checking and contextual-interpretation process, properly understood.

We also withdraw the claim that the present comparative qualitative design "allows the question to be tested" in any strong, hypothesis-testing sense; this phrasing, noted by the reviewers as inconsistent with the study's actual methodology, more accurately describes a positivist aspiration than the exploratory, descriptive work undertaken here. What this study can more defensibly claim is that it has generated a set of plausible, internally coherent, but unconfirmed hypotheses about how maritime cadet sub-groups might differ psychologically and spiritually, hypotheses that future research with larger samples, comparison or control conditions, and ideally longitudinal or quasi-experimental elements could test with greater rigour.

Strengths and limitations, stated together

We integrate strengths and limitations here rather than treating them as separate sections, since several of the study's apparent strengths carry limitations that qualify them directly. The equal sampling across three majors supported systematic comparison, but the small cell size ($n = 10$ per major) precluded any inferential statistical testing and means that reported numerical differences, however described, should not be read as established group-level effects. The inclusion of lecturers and veterans enriched the interpretive context, but their input functioned as contextual

³³ Widjaja Sugiri. "Spiritual Experience and Character Formation: Finding Balance in Pentecostal Spiritual Formation Tradition". *Indonesian Journal of Religious* 8, no. 2 (2025): 65–80. <https://doi.org/10.46362/ijr.v8i2.45>; Ericson Sihombing and Dorlan Naibaho. "Wibawa Guru Pendidikan Agama Kristen Terhadap Perkembangan Mental Peserta Didik: Studi Kasus UPT SMP 010 Parsingguran". *Indonesian Journal of Service* 1, no. 1 (2025): 47–60. <https://doi.org/10.46362/ijr.v1i1.44>.

plausibility-checking rather than independent corroboration, for the reasons discussed above.

The qualitative-dominant design allowed access to the texture of cadet experience that a purely quantitative survey might miss, but it correspondingly limits the statistical confidence with which any pattern can be asserted, and it does not eliminate — indeed, it cannot eliminate — the possibility that the act of converting interview material into thematic frequency tables imposed more order and coherence on the data than the underlying narratives actually contained. We did not formally quantify inter-coder agreement, which is a limitation of the analytic process. The purposive, volunteer-based sampling of cadets introduces a plausible self-selection bias that this study cannot rule out and that may affect the generalisability of findings even within STIP Jakarta itself, let alone to other institutions.

The cross-sectional, single-institution design cannot establish whether observed differences arise from formation, self-selection into majors, institutional scheduling differences, or some combination, and cannot support any claim about stability over time, despite the temptation — which the original manuscript succumbed to and this revision resists — to read veteran testimony as evidence of such stability. The reliance on self-report, including simple numerical ratings collected within an institutional setting where religious and institutional conformity may be implicitly valued, raises the possibility of socially desirable responding that this study's design cannot detect or correct for.

Implications, stated as hypotheses for future testing rather than as established recommendations

Given the foregoing, we offer the following not as confident practical recommendations but as specific, testable hypotheses that the present exploratory study generates for future confirmatory research. It is possible, though not established here, that cadets in different maritime majors would benefit from differentiated rather than uniform pastoral and psychological support; this could be tested through a comparative-effectiveness or quasi-experimental design that implements differentiated provision in some cohorts and uniform provision in others and compares outcomes. It is possible, though not established here, that institutional scheduling and physical training

intensity, rather than occupational identity per se, drive some of the coping-practice differences observed; this could be tested by collecting data on actual free time, physical fatigue, and living arrangements alongside coping-practice descriptions. It is possible, though not established here, that the patterns observed reflect self-selection into majors rather than formation effects; this could be tested through a longitudinal design surveying students before major selection and following them through formation. We regard the specification of these testable hypotheses, rather than the confident assertion of practical recommendations, as the more appropriate and more honest contribution of an exploratory study of this kind, and we thank the reviewers for prompting this recalibration.

We also note that any recommendation extending beyond STIP Jakarta to "other maritime academies" or to "maritime regulatory bodies," as the earlier manuscript proposed, is not supported by a single-institution study with this sample size and design, however well-conducted; such extension would require, at minimum, replication across multiple institutions with differing religious and cultural compositions before any confident generalisation could be offered.

CONCLUSION

This exploratory, qualitative-dominant study examined mental health, spiritual coping, and wellbeing among nautical, engineering, and port and shipping management cadets at STIP Jakarta. While overall self-rated stress and wellbeing levels were broadly similar across the three majors, cadets described some patterned variation in the content of their stressors, the spiritual coping practices they mentioned, and the wellbeing dimensions they emphasised. These patterns are offered as suggestive and hypothesis-generating rather than as demonstrated occupational effects, since the study's small sample, single-institution setting, cross-sectional design, and reliance on volunteer participants and unvalidated instruments preclude stronger claims. Lecturer and veteran responses provided face validity for the patterns described but should not be read as independent corroboration of their stability or causal origin. The study's principal contribution is the specification of testable hypotheses, grounded in descriptive qualitative evidence, for future research that could examine with greater rigour whether maritime cadet sub-disciplines differ meaningfully in their psychological

and spiritual profiles, and if so, why.

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