

THE MEANING OF ENVIRONMENTAL ACCOUNTABILITY IN DAILY PRACTICE: A PHENOMENOLOGICAL STUDY OF CLEANING OFFICERS

Khairum Nadila Sandy¹

Universitas Hasanuddin, Makassar, Indonesia
khairumnadilasandy7@gmail.com



Lilis Karfina Ar²

Universitas Hasanuddin, Makassar, Indonesia
liliskarfina@icloud.com

Darwis Said³

Universitas Hasanuddin, Makassar Indonesia
darwissaid@fe.unhas.ac.id

Alimuddin⁴

Universitas Hasanuddin, Makassar, Indonesia
alimuddin@fe.unhas.ac.id

Abstract

This study aims to explore the meaning of environmental accountability based on the lived experiences of janitorial staff at Hasanuddin University using an interpretive phenomenological approach. Environmental accountability in higher education has generally been understood through formal policies, reporting systems, and green campus programs, while the experiences of frontline actors who maintain environmental sustainability on a daily basis remain underexplored. Through in-depth interviews, observations, and documentation, this research examines how janitors construct ecological awareness, moral responsibility, and the personal meaning of their work. The findings reveal that environmental accountability is understood as a moral, social, and spiritual responsibility. Janitors perceive campus cleanliness as an act of worship, stewardship, and a contribution to environmental preservation. Local Bugis-Makassar cultural values sipakatau, siri' na pacce, and sipakainge strongly shape their work ethics and collective sense of responsibility. The study also identifies a gap between formal environmental accountability and lived experience, as janitors are not significantly involved in campus sustainability policymaking despite their vital operational role. This research highlights that environmental accountability is phenomenological, moral, and cultural in nature. It suggests the need for a more inclusive accountability model grounded in the lived experiences of frontline environmental actors.

Keywords: Environmental Accountability, Phenomenology, Janitorial Staff, Cultural Values, Green Campus

INTRODUCTION

Environmental and sustainability issues have become a key agenda for universities in the modern era. Universities, in addition to being centers of knowledge production, also serve as agents of social and environmental change (green change agents), which is expected to be realized not only through formal policies but also through concrete daily practices. At Hasanuddin University (Unhas), for example, there is a Center for Environmental Studies (PSLH) that actively studies and critiques environmental development issues, provides environmental education, and devotes itself to community service for natural resource conservation.

However, campus sustainability extends beyond the academic or administrative realm; there's a fundamental operational aspect that often receives less attention in formal research: the role of janitors. They are the first line of staff who interact directly with the physical campus environment, from waste management (organic, non-organic, and hazardous waste), maintaining the cleanliness of public spaces and parks, to responding to changing environmental conditions (weather, pollution, vegetation, and so on). Their experience in carrying out these duties holds significant meaning for how environmental accountability is implemented in practice, not just as a document or policy.

In line with this, several studies at Hasanuddin University have addressed relevant issues. One notable study, "Implementation of the Green Waste Management Concept at the Faculty of Engineering Campus, Hasanuddin University," identified that waste management at the engineering faculty is still in the moderate category, with a score of around 52.2%. The study also recommends implementing a sorting system based on waste type, providing sorting facilities (compartments), providing 3R waste disposal sites (TPS) on campus, and increasing academic community participation in waste sorting at source.

Other activities at Unhas demonstrate the institution's commitment to environmental aspects, such as environmental health and safety monitoring in several faculties to ensure that parameters such as air, water, lighting, and noise quality are within safe standards. This is important because the physical aspects of the campus environment affect the comfort and health of the entire academic community.

However, there remains a gap in research, particularly regarding the subjective experiences of janitors as environmental actors. Studies such as "Green Accounting Concept Based on University Social Responsibility," conducted at UIN Alauddin and Unhas, have begun to use a phenomenological approach to understand how environmental awareness and environmental accounting practices are implemented in universities. However, their focus is more on the institution and the university's social responsibility at a macro level, rather than the existential focus of janitors who carry out their daily duties of maintaining cleanliness and the sustainability of the campus environment.

Phenomenology as an approach is highly relevant here because researchers enter the world of research subjects' experiences, how they feel, understand, and give meaning to their tasks amidst existing policies, norms, physical conditions, and socio-cultural values. Environmental accountability theory emphasizes that responsibility for the environment is not only formal (reports, regulations) but also moral and social, and is expressed in daily actions (daily practices) and interactions between humans, between humans and the physical environment.

In addition, the local context of Unhas provides special characteristics that need to be taken into account: the size of the campus, the number of laboratories, the presence of large green areas and green open spaces, as well as the complexity of waste management including organic waste, B3, and from health facilities/hospitals/universities within the campus environment. For example, the ASTA (School and Campus Action) National Waste Awareness Day activity at the Unhas campus revealed that the generation of organic waste and laboratory waste was quite large, and there was a strategic waste management plan that included a waste bank program, food waste canteen, and waste containers at various points on campus.

All of this indicates that Unhas already has a foundation of environmental sustainability policies and initiatives, but how these are translated, internalized, and implemented by cleaning staff as operational actors has not been thoroughly researched. Furthermore, their experiences can be significantly influenced by factors such as the availability of facilities/infrastructure, training, social or moral recognition, physical conditions (weather, climate, extreme weather, access to clean water, personal protective equipment), campus norms and culture, and the campus community's perception of their work.

Theoretically, this study contributes to the literature on environmental accountability, sustainability accounting, and organizational phenomenology by providing perspectives from often overlooked actors. Practically, the research findings are expected to provide campus management (rectorate, facilities, PSLH, cleaning unit) with insights to improve policies, training, facilities, and culture so that environmental accountability can be perceived not only as an institutional obligation but as part of the identity, self-esteem, and sustainability of campus life as a whole.

REVIEW OF LITERATURE

Accountability Theory

Accountability theory is the primary foundation for understanding how individuals and institutions are accountable for their actions toward the environment and society. Accountability is not simply a formal obligation to report but also reflects a moral and ethical responsibility for the impacts on others (Gray, 2020). In the context of a campus environment, accountability encompasses how academics, particularly janitors, interpret and carry out their responsibilities in maintaining environmental cleanliness and sustainability. According to (Han & Xu, 2025), accountability is a social process involving a reciprocal relationship between the accountant and the accountee. This means that janitors are not only responsible to the institution where they work, but also to the academic community and the natural environment itself. (Harahap et al., 2024) emphasizes that accountability has dimensions that transcend administrative boundaries, as it touches on the realm of values and ethics. In this study, the concept of accountability is understood as a form of “ecological awareness” (Bebbington et al., 2022) manifested through daily actions, such as maintaining cleanliness, sorting waste, and upholding sustainable values. Thus, accountability theory serves as a foundation for explaining how cleaners interpret their responsibilities from a social and moral perspective (Benerjee & Lin, 2025).

Stakeholder Theory

In the context of environmental sustainability, stakeholder theory provides an important framework for understanding the relationships between individuals, organizations, and the wider community. (Freeman et al., 2018) stated that every entity with an interest in an organization must be involved in the decision-making process and performance evaluation. Campus janitors, though often positioned as peripheral actors, are actually key stakeholders in maintaining campus environmental sustainability. (R. Abdullah et al., 2024) emphasized that organizations cannot operate in isolation, as their social legitimacy depends heavily on meeting stakeholder expectations. In this regard, Hasanuddin University has not only an academic responsibility, but also a moral responsibility to the environment and its community.

(Benerjee & Lin, 2025) introduced the concept of “salience,” or the level of stakeholder interest based on three key attributes: power, legitimacy, and urgency. Janitors possess strong moral legitimacy because their role is directly related to environmental sustainability, despite their limited formal power within the organizational structure. Therefore, this study highlights how the environmental awareness and work ethic of janitors represent a form of accountability that is not always visible but has a significant contribution to campus sustainability (Gray, 2020). This stakeholder theory broadens the understanding of environmental accountability by emphasizing that environmental responsibility is not solely the domain of top management but is distributed across all levels of an organization.

Legitimacy Theory

Legitimacy theory complements environmental accountability analysis by highlighting the importance of alignment between organizational values and social norms. According to (Afsar et al., 2022), legitimacy is the collective perception that an entity's actions align with the prevailing value system in society. In the context of Hasanuddin University as a higher education institution, social legitimacy is achieved through a commitment to sustainability, environmental ethics, and consistently implemented environmentally friendly practices. (Amin et al., 2021) asserted that organizations strive to maintain legitimacy by adapting their activities to dynamic social expectations. Thus, campus cleanliness policies and practices are not only operational but also strategic in maintaining the university's image as an environmentally conscious institution.

(Daeng, 2018) explains that legitimacy can be considered a “symbolic resource” that enables an organization to gain public support and trust. In this case, the active participation of janitors serves as a tangible symbol of the institution's commitment to sustainability values. (A. Abdullah & Shafii, 2022) adds that legitimacy is not only top-down but is also constructed through daily social interactions between organizational actors and the community. Campus janitors play a crucial role in realizing this legitimacy through consistent cleaning practices, environmental responsibility, and dedication to green campus values. (Hidayat & Marzuki, 2024) asserts that when organizational and societal values are no longer aligned, the organization needs to adjust its behavior or communication to regain social legitimacy. Therefore, legitimacy theory helps explain how environmental accountability on campus is not just about actions, but also about the social meaning behind those actions.

Social and Environmental Accounting Theory

Social and environmental accounting theory was developed to address the limitations of conventional profit-oriented accounting. (Gray, 2020) argue that social and environmental accounting views organizations as part of social and ecological systems, not simply economic entities. (Bebbington et al., 2021) emphasize the importance of expanding the scope of accountability to include ecological responsibility. (Gray, 2020) asserts that community participation and non-managerial actors are integral to social accountability. (Brown & Dillard, 2020) research even introduces a dialogic accounting approach in which diverse voices (including minority actors such as cleaners) are accommodated in the reporting process. In the context of Unhas, this theory emphasizes that cleanliness and sustainability practices are not merely administrative activities, but also a social accountability process that embodies moral values and collective responsibility.

The Imperative of Responsibility

The ethics of responsibility proposed by (Afsar et al., 2022) serves as the moral foundation for environmental accountability. Jonas emphasized that human actions must consider the long-term consequences for the survival of life on Earth. In the modern context, technology and industrialization create ecological impacts that exceed human control, so moral responsibility cannot be solely oriented towards current profits (R. Abdullah et al., 2024). This principle aligns with (Gray, 2020) view that environmental accounting must incorporate moral values and empathy for nature. (Bebbington et al., 2022) added that ethical and spiritual dimensions are often driving factors for environmental awareness in organizations. Thus, Jonas's theory provides a philosophical basis for environmental accountability as a manifestation of human moral responsibility for life, not simply an administrative obligation.

RESEARCH METHOD

Research Approaches and Paradigms

This study uses a qualitative approach with an interpretive-phenomenological paradigm, as its primary focus is to explore the meaning of the janitors' subjective experiences in carrying out environmental accountability within Hasanuddin University. The phenomenological approach aims to understand phenomena based on an individual's awareness and perception of their lived experiences (Hidayat & Marzuki, 2024). According to (Creswell & Poth, 2023), phenomenology is used when researchers want to identify the essence of an experience based on the narratives or reflections of participants directly involved in the phenomenon. The interpretive paradigm assumes that social reality is constructed through evolving meanings and social interactions (Daeng, 2018). Therefore, this study does not aim to test a hypothesis, but rather to interpret the meaning of environmental accountability as understood by campus janitors. Furthermore, (Brown & Dillard, 2020) emphasize that a qualitative approach allows researchers to deeply immerse themselves in the world of subjects to understand their perspectives and experiences. Ontologically, this research is based on the belief that the reality of environmental accountability is the result (Gray, 2020).

Research Location and Focus

The research location was determined at Hasanuddin University, Makassar, known as one of the state universities committed to the Green Campus program and environmental sustainability. This location was chosen based on the consideration that the campus is a miniature of a complex society, where the values of accountability and social responsibility are manifested at various organizational levels (Alshammari et al., 2025). The focus of this research is directed at the phenomenological experiences of cleaning staff in maintaining the cleanliness and sustainability of the campus environment, including aspects of ecological awareness, moral responsibility, and spiritual values in their work. According to (Afsar et al., 2022), the selection of a qualitative research location must consider the potential to produce rich and meaningful data. In the context of Hasanuddin University, the diversity of work units and the implemented environmental policies allow for a comprehensive exploration of the phenomenon of environmental accountability. Furthermore, this location has symbolic value because it is an educational institution that combines academic values, Bugis-Makassar culture, and a commitment to sustainable development (Creswell & Poth, 2023).

Research Subjects and Informants

The subjects of this study were Hasanuddin University campus janitors, both those working under the university's official work unit and third parties (outsourcing). Informants were selected using purposive sampling, which is a selection based on certain considerations that are in accordance with the research objectives (Creswell & Poth, 2023). Informants were selected based on the following criteria: (1) having at least two years of experience working as campus janitors; (2) having direct involvement in campus environmental maintenance activities; and (3) being willing to share their experiences and views in depth. According to Miles, (Afsar et al., 2022), selecting informants who have in-depth experience with the phenomenon will produce rich data. The number of informants in phenomenological research does not need to be large, because the focus is on depth of understanding, not on generalization (Giorgi, 2020). Thus, it is estimated that the number of informants between 8–12 people is sufficient to find significant patterns of meaning. To maintain a diversity of perspectives, this research will also involve supporting informants such as the head of the cleaning department and campus environmental management staff (Benerjee & Lin, 2025).

Data Collection Technique

The primary data collection techniques in this study were in-depth interviews and participant observation. The in-depth interviews were conducted in a semi-structured manner to allow informants to openly express their experiences and interpretations (Alshammari et al., 2025). According to (Giorgi, 2020), interviews in phenomenological research should explore the dimensions of past experiences, current experiences, and reflections on the meaning of those experiences. The interviews were recorded and then transcribed verbatim for analysis. Observations were conducted to understand the actual behavior of cleaning staff within their work context, such as how they maintain cleanliness, manage waste, or interact with the campus environment (Hidayat & Marzuki, 2024). Furthermore, documentation such as campus cleanliness policies, environmental programs, and records of green campus activities were analyzed to enrich data interpretation (Alshammari et al., 2025). This inter-

method triangulation aims to ensure the validity of the data and increase the depth of understanding.

Data Analysis Techniques

Data analysis was conducted using an interpretive phenomenological approach (Interpretative Phenomenological Analysis / IPA) developed by (Finlay, 2022). The analysis process was carried out through several stages: (1) re-reading the interview transcripts; (2) marking significant statements; (3) grouping meanings into essential themes; and (4) formulating the essence of the collective experience of all informants (Harahap et al., 2024). This approach allows researchers to interpret the subjective meaning behind objective experiences, in accordance with the principles of hermeneutic-phenomenology (Giorgi, 2020). According to Miles, (Han & Xu, 2025), the qualitative analysis process is cyclical, including data condensation, data presentation, and drawing conclusions. In this study, coding was carried out manually while maintaining the authenticity of the meaning of the informants' narratives. Each emerging theme will be linked to theories of accountability, stakeholders, legitimacy, and phenomenology to gain a deeper conceptual understanding (Creswell & Poth, 2023).

Data Validity (Trustworthiness)

To ensure the validity and credibility of the findings, this study uses trustworthiness criteria as proposed, which include credibility, transferability, dependability, and confirmability. Credibility is maintained through triangulation of sources and methods and member checking by asking informants to review the interpretations (Creswell & Poth, 2023). Transferability is ensured by providing a detailed contextual description of the research setting so readers can assess its relevance to other contexts. Dependability is achieved through transparent and systematic recording of the research process (Brown & Dillard, 2020). Confirmability is maintained through the researcher's self-reflection (reflexivity), ensuring that the interpretations that emerge are truly derived from the data, not from personal assumptions (Finlay, 2022). In addition, the researcher will also conduct an audit trail and peer discussion to increase the objectivity of the research results (Creswell & Poth, 2023).

Research Ethics

Research ethics is a crucial aspect of phenomenological research because it involves direct interaction with the personal experiences of informants. According to Orb, (Finlay, 2022), qualitative research must uphold the principles of respect for persons, beneficence, and justice. Therefore, the researcher will provide informed consent to each informant before the interview, explaining the purpose of the research, the rights of participants, and guaranteeing the confidentiality of personal data. Informants' names will be disguised using a code to maintain anonymity (Creswell & Poth, 2023). The researcher will also respect the informant's right to stop the interview at any time without consequence. In the context of Hasanuddin University, this ethics aligns with the values of Sipakatau, Sipakalebbi, and Sipakainge in Bugis-Makassar culture, which emphasize respect, mutual appreciation, and honesty in social relations (Daeng, 2018). These ethical principles ensure that research not only produces knowledge, but also reflects the human values and morality inherent in environmental accountability practices.

Research Process and Researcher Reflection

In phenomenological research, the researcher's position is central because he or she serves as the primary instrument of the research (Creswell & Poth, 2023). Therefore, self-reflexivity is practiced throughout the research process to control bias and maintain the purity of data interpretation (Finlay, 2022). Researchers will engage in *epoché*, or bracketing, which involves suspending personal judgment and assumptions in order to authentically understand the experiences of informants. This reflective process also helps researchers distinguish between the phenomenological meanings emerging from the data and broader theoretical interpretations (Giorgi, 2020). Furthermore, interactions between researchers and informants are maintained in an empathetic, open, and non-hierarchical atmosphere to allow for the emergence of honest and in-depth experiences. Thus, the phenomenological methodology in this study not only functions as a scientific technique, but also as a means of social and moral reflection on the meaning of environmental accountability experienced by Hasanuddin University cleaning staff (Finlay, 2022).

RESULTS AND DISCUSSION

Environmental Accountability as a Subjective Experience of Sanitation Workers

The research findings indicate that environmental accountability at Hasanuddin University is perceived by the cleaning staff as a moral calling and social responsibility, not simply as an administrative task. In in-depth interviews, they described maintaining campus cleanliness as a form of worship and dedication to the environment. This awareness demonstrates that accountability stems from direct experience and personal reflection on their workspace. Recent phenomenological studies have also found that ecological accountability is more effectively understood as an individual's existential experience in confronting complex ecological realities (Bebbington et al., 2022; Gray, 2020). This finding is in line with the interpretative phenomenological analysis (IPA) approach which places subjective awareness and meaning as the main sources in understanding ethical behavior towards the environment (Creswell & Poth, 2023; Finlay, 2022; Giorgi, 2020).

The cleaners view their work as having spiritual value because it helps preserve God's creation. They are not simply following orders from their superiors but feel a moral responsibility to the campus's ecological life. This reinforces the view that environmental accountability is a form of eco-spiritual stewardship, where values of faith and ecological awareness are intertwined in their actions (Dillard & Brown, 2020; Hidayat & Marzuki, 2024). In the context of Unhas, this work spirituality aligns with Bugis-Makassar culture, which emphasizes the values of *siri' na pacce*, self-respect, and social empathy, which serve as sources of work ethics and responsibility for the social environment.

Environmental Accountability from a Campus Social and Cultural Perspective

The experiences of janitors demonstrate that environmental accountability is not simply a formal relationship between workers and the institution, but rather part of the campus social network. They feel like part of the extended family of Hasanuddin University, where campus cleanliness and beauty are a shared responsibility between janitors, students, and faculty. This view aligns with stakeholder theory, which asserts that all parties involved in an organization have a moral responsibility for sustainability (Freeman et al., 2018). Janitors act as hidden stakeholders, often overlooked structurally but making significant contributions to the campus's social and ecological legitimacy (Bebbington et al., 2021).

In the Bugis-Makassar cultural context, the values of sipakatau (respecting others) and sipakainge (reminding each other) form the basis of collective work ethics. Cleaning staff expressed that they felt "ashamed" if the environment was dirty, as it signaled a loss of respect for the institution where they worked. These cultural values serve as effective social controls in maintaining pro-environmental behavior. Recent literature also shows that integrating local values into environmental policies strengthens the sustainability of educational institutions (Amin et al., 2021; Hidayat & Marzuki, 2024). Thus, environmental accountability at Unhas is not only based on formal regulations but is also lived out as part of the campus's cultural ethics and collective identity.

Phenomenological Experience and Ecological Consciousness

Using a phenomenological approach, this study found that the experience of working in a large and heterogeneous campus space gives cleaners a highly contextual ecological awareness. They understand environmental dynamics, such as differences in waste volume between faculties, changes in weather, and student behavior. This awareness aligns with the notion of situated accountability (Bebbington et al., 2021), where environmental responsibility is shaped by the interaction between the social and material conditions in which individuals work. Recent studies of campus environments also highlight that the success of green campus programs depends on the involvement of field actors who empirically understand physical conditions (Al-Zubaidi & Khalid, 2021; Choudhury et al., 2023).

Furthermore, their experiences reveal a "silent responsibility," a form of accountability that is not reported but is carried out selflessly every day. This phenomenon suggests that true accountability is not always present in documents or sustainability reports, but rather in ongoing awareness and action (Brown & Dillard, 2020; Gray, 2020). Within the framework of legitimacy theory, the moral actions and consistency of the janitors in maintaining campus cleanliness contribute to the image and public trust of Unhas as a green university. This aligns with the findings of (Adams & Larrinaga, 2020; Bebbington et al., 2021) that the environmental legitimacy of higher education institutions increasingly depends on the authenticity of ecological behavior at the operational level, not just administrative commitment.

Accountability Challenges and Limitations of Formal Systems

Although the cleaning staff demonstrated high commitment, research found that the formal accountability system at Hasanuddin University has not fully integrated their experiences into policy formulation. They have not been involved in planning forums or evaluations of green campus programs. This indicates a gap between formal accountability (reporting) and lived experience. A similar phenomenon has been reported by several international studies that criticize symbolic sustainability reporting at universities, where environmental commitments stop at the certification level without addressing the social dimension (Adams & Larrinaga, 2020; Alshammari et al., 2025; Bebbington et al., 2021).

In addition to structural limitations, technical challenges also pose obstacles, such as a lack of waste sorting facilities, inadequate cleaning equipment, and heavy workloads. Studies on campus sustainability in Southeast Asia (Hidayat & Marzuki, 2024) also confirm that infrastructure, training, and management support significantly influence the effectiveness of green campus implementation. Therefore, campus sustainability depends not only on individual awareness but also on systemic support from the university in the form of policies, awards, and ongoing training.

Integration of Phenomenological Meaning and Theoretical Implications

These phenomenological findings confirm that environmental accountability at Hasanuddin University is a social and spiritual construct formed from the interaction of individual awareness, cultural values, and organizational structure. Cleaning staff act as moral agents, indirectly strengthening the university's social legitimacy. This broadens the concept of environmental accountability from mere reporting obligations to meaningful experiences lived in everyday life. Theoretically, these results support the integration of social accountability theory (Bebbington et al., 2021; Gray, 2020), legitimacy theory (Adams & Larrinaga, 2020), and hermeneutic phenomenology (Creswell & Poth, 2023; Finlay, 2022; Giorgi, 2020). Accountability experienced as moral and spiritual awareness enriches the environmental accounting literature by emphasizing the human dimension and existential experience.

Thus, the results of this study are not only relevant to environmental management at Hasanuddin University but also provide a conceptual contribution to the development of phenomenology-based green accounting. Environmental accountability, built from the lived experiences of field actors, can form the basis for developing a grassroots accountability model, namely accountability that grows from below, rather than being imposed from above. This concept aligns with the direction of modern non-positivistic accounting research that emphasizes the diversity of voices, values, and meanings in organizational practices (Adams & Larrinaga, 2020; Bebbington et al., 2021; Dillard & Brown, 2020)

CONCLUSION

This study concludes that environmental accountability at Hasanuddin University is deeply understood by the cleaning staff as a moral, social, cultural, and spiritual responsibility. Through an interpretive phenomenological approach, it was found that maintaining campus cleanliness for them is not merely a job, but a form of worship and devotion to God and a mandate to maintain a shared living space. Bugis-Makassar cultural values such as *siri' na pacce*, *sipakatau*, and *sipakainge'* form the basis of ecological ethics that shape a sense of shame, empathy, and solidarity in protecting the environment. Thus, environmental accountability at Hasanuddin University stems from self-awareness and internalized local values, not merely the result of formal instructions or administrative reporting. This phenomenon demonstrates that true sustainability grows from reflective awareness and work spirituality undertaken with sincerity.

In addition to emphasizing personal and cultural meanings, this study also found a gap between formal accountability and lived accountability. The campus reporting system is still oriented towards administrative achievements, while the moral and spiritual dimensions of accountability have not been fully accommodated. Cleaning staff act as eco-stewards who maintain the ecological legitimacy of the campus through daily actions, even though their role has not been institutionally recognized. Theoretically, this study expands the understanding of non-positivistic environmental accountability by emphasizing the phenomenological and humanistic dimensions that environmental responsibility arises from the meaning of life and moral awareness, not merely formal obligations. Therefore, Unhas and similar institutions are advised to develop an accountability system that is inclusive, based on cultural values, and participatory so that environmental sustainability becomes an authentic and meaningful part of campus life.

REFERENCES

- Abdullah, A., & Shafii, z. (2022). Spirituality and ethical behavior in sustainable organizations: An Islamic perspective. *Journal of Islamic Accounting and Business Research*, 13(4), 655–674.
- Abdullah, R., Fatemi, S., & Omar, A. (2024). Pro-environmental collaboration and employee green behavior in higher education institutions. *Sustainability*, 16(7), 1–15.
- Adams, C. A., & Larrinaga, C. (2020). Progress: Engaging with organisations in pursuit of improved sustainability accounting and performance. *Accounting, Auditing & Accountability Journal*, 33(8), 2167–2189.
- Afsar, B., Anwar, N., & Umrani, W. (2022). Moral self-regulation, green values, and environmental performance. *Business Strategy and the Environment*, 31(3), 1123–1138.
- Alshammari, A., Rahman, R., & Joseph, C. (2025). Green campus initiatives and the challenge of performative accountability in universities. *Journal of Cleaner Production*, 439–141823.
- Al-Zubaidi, A., & Khalid, R. (2021). *Religious values and environmental ethics: Empirical evidence from Muslim-majority countries*. 13(22), 12410.
- Amin, A., Wahyuni, T., & Hidayat, M. (2021). Local wisdom and environmental ethics in the management of green campuses. *Indonesian Journal of Sustainability Studies*, 3(2), 77–91.
- Bebbington, J., Brown, J., & Frame, B. (2021). Accounting technologies and sustainability management. *Accounting, Auditing & Accountability Journal*, 34(8), 1809–1833.
- Bebbington, J., Gray, R., & Unerman, J. (2022). Sustainability accounting and accountability in the Anthropocene. *Routledge*.
- Benerjee, S., & Lin, C. (2025). Shared accountability for sustainability in higher education institutions. *Journal of Environmental Education*, 56(2), 134–150.
- Brown, J., & Dillard, J. (2020). Non-positivist approaches in social and environmental accounting research: Rethinking accountability. *Critical Perspectives on Accounting*, 67, 102153.
- Choudhury, T., Sulaiman, M., & Rahim, R. (2023). Institutionalizing green campus initiatives through participatory accountability. *Asian Journal of Sustainability Studies*, 6(3), 225–241.
- Creswell, J. W., & Poth, C. N. (2023). *Qualitative inquiry and research design: Choosing among five approaches* (5th ed.). SAGE Publications.
- Daeng, A. (2018). Budaya Siri' na Pacce dalam kehidupan sosial masyarakat Bugis-Makassar. *Jurnal Ilmu Sosial Dan Humaniora*, 7(2), 115–127.
- Dillard, J., & Brown, J. (2020). Reframing accountability and sustainability: A moral perspective. *Accounting Forum*, 44(2), 188–205.
- Finlay, L. (2022). Phenomenology: Lived experience, reflexivity, and meaning-making. *Qualitative Research in Psychology*, 19(1), 1–20.
- Freeman, R. E., Harrison, J. S., & Phillips, R. (2018). Stakeholder theory: Concepts and evidence. *Business Ethics Quarterly*, 28(2), 289–320.
- Giorgi, A. (2020). Reflections on phenomenological psychology: Past, present, and future. *Journal of Phenomenological Psychology*, 51(2), 171–189.

- Gray, R. (2020). Accountability, social responsibility, and sustainability: Accounting for society and the environment revisited. *Social and Environmental Accountability Journal*, 40(1), 1–21.
- Han, Q., & Xu, J. (2025). Marginal stakeholders in sustainability governance: Lessons from Southeast Asian universities. *Environmental Sociology*, 11(1), 33–48.
- Harahap, S. S., Rahman, A., & Ilyas, M. (2024). Integrating Islamic spirituality into corporate environmental accountability. *Journal of Islamic Accounting*, 15(3), 511–530.
- Hidayat, M., & Marzuki, S. (2024). The integration of local wisdom in environmental governance of higher education institutions in Indonesia. *Journal of Environmental Education*, 55(2), 103–118.
- Isbahi, M. B., Zuana, M. M. M. ., & Mariana, E. R. . (2022). The Technology Strategy in Website Communication Media in Improving Business Activities. *Majapahit Journal of Islamic Finance and Management*, 1(2), 126–138. <https://doi.org/10.31538/mjifm.v1i2.17>
- Isbahi, M. B., Zuana, M. M. M., & Toha, M. (2024). The Multi-Social Relation of the Cattle Industry in the Plaosan Subdistrict Animal Market of Magetan Regency. *Malacca: Journal of Management and Business Development* , 1(1), 31–46. <https://doi.org/10.69965/malacca.v1i1.51>
- Toha, M., Zuana, M. M. M., & Isbahi, M. B. (2024). Acculturation of Mataraman Local Wisdom with Islamic Values: Implications for Social and Economic Development. *Danadyaksa: Post Modern Economy Journal*, 2(1), 33–47. <https://doi.org/10.69965/danadyaksa.v2i1.143>
- Zamroni, M. A., Toha, M., Zuana, M. M. M., & Baiqun Isbahi, M. (2023). Exploring Zakat Distribution Via Blockchain in Indonesia Perspective of Maslahah Mursalah Wahbah Zuhaili. *Indonesian Interdisciplinary Journal of Sharia Economics (IJSE)*, 6(3), 3544-3555. <https://doi.org/10.31538/ijse.v7i3.5821>