AN OVERVIEW OF MUSLIM SPIRITUAL ECO-EDUCATION

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Abstract: Recent attention to eco-education and environmental education reveals a gap in comprehending the interconnection between religion, spirituality, and eco-education. This paper explores the intersection of Muslim spirituality and environmental education, highlighting interconnectivity, co-existence, and spirituality's role in understanding humanity's place, stewardship of natural resources, and regulation of ecological footprints. It delves into the cultivation of awareness, values, and attitudes for environmental preservation, exploring motivations, engagement, and skills vital for sustaining the learning process and promoting conservation. The study scrutinizes how Muslim spirituality shapes the core concepts and methodologies of eco-education, impacting global challenges like climate change and sustainability. It stresses the necessity of exploring environmentally focused educational programs guided by spiritual principles, urging an investigation into barriers hindering the translation of theoretical principles and frameworks into practical applications. The study calls for further

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exploration of strategies sustaining the symbiotic relationship between spirituality and evolving literature, as well as practical experiences in eco-education.

Keywords: Eco-Education, Muslim Spirituality, Earth Stewardship.

1. Introduction

The destruction of natural ecosystems and exponential population growth has led to the degradation of the natural world, which has had far-reaching consequences for humankind and nature (Boeve-de, & Van Petegem, 2011). This calls for serious reviews of current discourses and practices on environmental sustainability. At this juncture, education plays a crucial role in developing responsible attitudes and commitments for culturally plural, socially just, and environmentally sustainable development (Conde & Sánchez, 2010). Humans possess the power to transform the environment, which accelerated the changes in the balance of nature (Gillett, 1977). This accounts for the origin of the Eco-Education movement in the late 1800s led by conservationists John Muir and Enos Mills who believed stories could help teach the importance of nature. In 1891, Wilbur Jackman wrote "Nature Study for the Common Schools" to educate urban dwellers who were, in his view, disconnected from the natural world. In the early 20th century, numerous naturalist programs were initiated to promote a better understanding of nature and agriculture (Hobert, 2010).

The Eco-Education movement took a stronghold in 1970 with the first known celebration of Earth Day, followed by the initiation of a Journal of Environmental Education in 1969. Much of the theoretical work on Eco-Education is based on major documents, namely, the Belgrade Charter and the Tbilisi Declaration. The former was adopted in 1975 by the United Nations at the International Conference on Environmental Education in Belgrade, Yugoslavia, which states that the foremost objective of Eco-Education is to develop a world population that is well acquainted with the environment and the problems associated with it through the knowledge, skills, motivations, and

commitment to work both individually and collectively towards the sustainable environment (Global Development Research Center, 2004). The latter was the international conference on Eco-Education, organized by the United Nations Education, Scientific, and Cultural Organization (UNESCO) in cooperation with the UN Environment Programme (UNEP) in 1977. This document outlined a series of roles, objectives, and characteristics of the Eco-Education curriculum and programs (Locke, Russo, & Montoya, 2013).

As environmental challenges continue to evolve, eco-education stands as a powerful tool necessary for equipping individuals with the knowledge and values needed for a sustainable and harmonious future. As a pioneering organization steering the environmental research needed to inform this pedagogy, UNESCO developed the first interdisciplinary global scientific program (Kastenholz & Erdmann, 1994, p. 15), as well as the first Inter-Governmental Conference on Environmental Education in Tbilisi, Georgia (USSR) in 1977, from which the Tbilisi Declaration was produced. This declaration placed major emphasis on introducing comprehensive environmental education programs to preserve and improve the world's environment (Hobert, 2010). Moreover, it also indicated several objectives and principles for the development of environmental education curricula and programs (Locke, Russo, & Montoya, 2013), which would seek to increase the overall degree of acquired environmental knowledge at the grade level while simultaneously developing critical thinking skills and awareness of the impact of economic and social factors upon the environment (Gillett, 1977).

The declaration focused on developing knowledge, problem-solving skills, and value clarification regarding environmental sensitivity in primary years of schooling. It placed a considerable emphasis on understanding regional and global levels of environmental issues to foster empathy, responsibility, and cooperation among students in addressing the environment (Locke, Russo, & Montoya, 2013). According to this declaration, environmental education must be based on the notion that natural and human-built environments are interdependent; this includes

interactions between biological, social, economic, and cultural forces (UNESCO, 1980).

Approaches to education should address key environmental challenges and equip individuals with the skills needed for environmental protection. The declaration calls on member states to integrate ecological concerns into their education policies, promoting research and innovation in environmental education. It emphasizes the need for international collaboration to allocate resources and strengthen the global environmental movement (Gillett, 1977).

This paper proposes merging eco-education and environmental education under the umbrella of spiritual education. Environmental education addresses broader issues and promotes sustainable behaviors, while eco-education delves into intricate ecological relationships. The integration of these with spiritual education creates a holistic perspective, fostering a deep spiritual connection with nature.

This multifaceted approach not only promotes practical environmental stewardship but also nurtures spiritual insight into our roles within ecosystems and the universe. By intertwining disciplines, spiritual education evokes reverence, mindfulness, and harmony, fostering a deeper appreciation for the natural world and spiritual dimensions of existence. The paper adopts 'Eco-Education' as the term encompassing the objectives of 'Environmental Education' within a spiritually cohesive framework.

Exploring Muslim spiritual eco-education is crucial for addressing present and future sustainability challenges. This importance lies in enhancing interdisciplinary integration, enabling holistic solutions to environmental issues and predicaments. Eco-education inherently adopts an interdisciplinary approach, spanning ecological sciences, ethics, and social sciences. This approach highlights diverse Muslim strategies in engaging with environmental communities and emphasizes the need to cultivate global environmental citizenship through an expansive, cross-boundary approach.

2. **Concept of Eco-Education**

Eco-education, also known as ecological education or eco-literacy, is an educational paradigm that has gained increasing attention in recent years. As environmental concerns sharply proliferate globally, the need to understand and integrate eco-education that is rooted in ecological principles, environmental awareness, and sustainability into educational systems has become more apparent. While there is no single agreed-upon definition for the term Eco-Education, the initiatives of Eco-Education are crucial to changing how students interact with the natural environment and show greater pro-environmental attitudes following environmental education activities (Coertjens et a.l, 2010).

The Wisconsin Environmental Education Board characterizes environmental education as an ongoing learning process aimed at cultivating an informed and engaged citizenry possessing problem-solving skills, scientific and social literacy, ethical awareness, and an understanding of the interrelationship between humans and the environment (1998). Gillett (1977) emphasizes that environmental education is crucial for preparing individuals to address contemporary environmental threats, imparting the requisite skills and values to actively contribute to improving life and safeguarding the environment, while upholding ethical principles.

Eco-education can be considered a pedagogical paradigm centered on ecological principles, environmental consciousness, and sustainability, which aims to encourage individuals to pre-emptively recognize environmental issues and their impact on micro and macro ecosystems. Eco-education employs experiential learning approaches and techniques, allowing learners to directly engage with nature (Hungerford & Volk, 2018). Interdisciplinary in nature, eco-education empowers individuals as global citizens to become better informed, involved and engaged in environmental challenge solutions.

Eco-Education seeks to acquaint people with an understanding of the consequences of individual actions on the environment and provide them with basic skills to critically analyze both elements of the issue and make informed decisions (Hobert, 2010). It perpetuates the basic skills, understanding, and

sentiments for human-environment relationships along with interrelationships between natural and social systems (Roth, 1968). The purpose of Eco-Education (EE) is to increase knowledge and awareness about the earth's environment and teach skills that lead to actions that will ensure its protection (Withgott & Brennan, 2008). Eco-Education seeks to produce a citizenry knowledgeable about the biophysical environment and its related problems, shows an awareness of how to help individuals solve these problems, and is motivated to work toward their solutions (Stapp, 1969). Eco-Education seeks to facilitate stage-relevant thinking and equip learners with the ability to discover their connection with the environment (Athman & Monroe, 2001).

However, Eco-Education requires the following: 1) Awareness and sensitivity to the environment and environmental challenges; 2) Knowledge and understanding of the environment and environmental challenges; 3) Attitudes of concern for the environment and motivation to improve or maintain environmental quality; 4) Skills to identify and help resolve environmental challenges, and 5) Participation in activities that lead to the resolution of environmental challenges. Eco-Education also requires multi-faceted knowledge, applied at every level through the utilization of a wide array of media and through targeting multi-stakeholders (Stapp, 1969). Environmental knowledge and positive attitudes alone however are not sufficient for achieving an end goal such as practice. Some have proposed enriching course contents with global issues inclusive of practical activities led by model instructors so that attitudes and behaviors may be positively influenced (Sadik, F. and Sadik. S, 2014: 2379-2385).

Eco-Education acknowledges technology's role in shaping environmental decision-making, emphasizing the connection between science, technology, society, and the environment (Palmer, 2002). Grounded in constructivism, which posits individuals construct knowledge based on experiences, effective environmental learning should be relevant, extending beyond the classroom to accommodate dynamic human cognition (Athman & Monroe, 2001). Scoullos, Argyro, and Vasiliki (2004) argue that

Eco-Education is most effective when embracing a social constructivist approach, engaging students in culturally acceptable and useful activities. Earth education programs have demonstrated improved environmental attitudes among participating students (Johnson and Manoli, 2008).

3. Spirituality and Eco-Education

Despite the rapid growth of knowledge and technology, humanity's impact on the planet surpasses its biocapacity, leading to an environmental crisis. This crisis is seen as a manifestation of a spiritual deficit, where the pollution of the human mind translates into ecological degradation (Cremo & Goswami, 1995). Environmental science knowledge does not always translate into sustainable behavior, prompting efforts to integrate spirituality into education (Thathong, 2012). In recent decades, there has been a significant focus on integrating spirituality into informal education, as evidenced by extensive discussions and efforts (Crowe, 2013). Pope Francis stresses the need for a transformative perspective in environmental education, redefining our relationship with nature (Francis, 2015). Ignoring the spiritual dimension in Eco-Education, as noted by Haluza-Delay (2000), may hinder personal and social change.

Spirituality, as a catalyst, can enhance inner consciousness, draw individuals closer to their nature, and increase self-awareness and accountability. Nature inherently holds educational potential, offering a path to counteract de-humanization and explore the self (Jirásek, Veselský, & Poslt, 2017). Our spiritual bond with nature is crucial for environmental restoration, emphasizing the need to consider spiritual experiences in Eco-Education (Thathong, 2012).

Thathong advocates for spirituality in Eco-Education to instill positive values like integrity, honesty, generosity, and social responsibility, fostering an environmentally conscious mindset, and ensuring a sustainable development of resources (2012).

Eco-education encourages innovative thinking and actions, relying on diverse perspectives and alternatives. Research, as seen in Hungerford & Volk (1990), identifies various factors

influencing environmental behavior. Sardar (1985) argues that addressing humanity's intrinsic nature, nurturing spiritual and intuitive qualities, fostering interconnectedness with nature, curbing destructive tendencies, and promoting harmonious interactions with the world are crucial for comprehensive solutions to environmental and developmental challenges.

With this perspective, one sees the potential and capabilities of spiritual capital and its impact on the design and implementation of Eco-Education. This study seeks to take advantage of the spiritual reservoir and ethical practice underlying much of the Muslim life, culture, and devotional practice. This is achieved through an exploration of the ways and means according to which Eco-Education would be placed effectively in its context of operation instead of being approached as an element to the whole system of spirituality.

Eco-Education and spirituality have been explored in studies and a series of interesting findings such as Behan, Richards, and Lee (2001), which revealed that individuals gain a sense of tranquility and experience, a sense of oneness while interacting with nature. Trainor and Norgaard (1999) concluded that out of 100 participants' experience of wilderness, 69% ascribed a spiritual element to the wilderness experience which brought them closer to the environment. The presence of spirituality in an Eco-Educational framework is due to the inherent focus on 'awareness of something greater that moves one outward to others as an expression of one's own spiritual experiences' (English and Gillen 2000, 1). Spirituality-based Eco-Education may allow for the development of strong spiritual relationships with the environment among individuals, which leads them to their willingness to take sustainable actions for the preservation of the environment (Skamp, 1991). Therefore, this holistic approach can serve to significantly address environmental issues more effectively and sustainably (Thathong, 2012).

Incorporating spirituality into higher education offers insights for constructing knowledge, making meaning of experiences, and experiencing authenticity, thereby contributing to the transformation of pedagogy and learning processes. For

students who are spiritual but not affiliated with an organized religious group, these activities can inspire a critical examination of their existing environmental attitudes. Through reflection and discourse, they may question assumptions and beliefs, leading to a transformative shift in their perception of their place, responsibility, and importance within the natural world (Crowe, 2013).

The integration of spirituality into continuing education has been successful in promoting authentic learning experiences and helping students make meaning of knowledge gained in the classroom (Tisdell, 2003; Tolliver & Tisdell, 2006). Haluza-Delay (2000) suggested that educators who "ignore the spiritual element miss essential avenues for personal and social change" (p. 149). It is essential to analyze the value of incorporating spirituality into environmental education to determine which methodologies are most effective at promoting transformation and, ultimately, behavioral change.

Jack Mezirow defined transformative learning as a "process by which we transform our status quo frames of reference to make them more inclusive, discriminating, open, emotionally capable of change, and reflective so that they may generate beliefs and opinions that will prove more true or justified to guide action" (2000, pp. 7-8). Transformation begins with a disorienting dilemma or event that causes individuals to question their assumptions or long-held beliefs. Once the individual is faced with such an event, critical reflection may commence. This is a solitary; private assessment performed by the individual to identify their long-held assumptions and reflect upon the validity of their beliefs. This is followed by critical discourse. The potential result of these events is perspective transformation. Mezirow described this as a change in the frame of reference. These frames of reference are described as "associations, concepts, values, feelings, [and] conditioned responses" (1997, 5).

In this course, Tolliver and Tisdell (2006) suggested that learning is more likely to be transformative if it permeates the whole self. This aspect of education includes the spiritual component of the individual. Much of Tisdell's research described how to incorporate spirituality into higher education as she

specifically related spirituality to foster transformation and paradigm shifts. A fusion of definitions forms a model of EE that includes awareness and sensitivity to the environment, environmental knowledge and understanding, an attitude of concern for the environment, problem-solving skills for ecological problems, and actions that lead to improved environmental conditions.

Hungerford and Volk's (1990) research described a complex mix of twelve major and minor variables contributing to an individual's environmental behaviors. These variables are categorized as entry-level variables, ownership variables, and empowerment variables. They also examined critical educational components that promote learner behaviors, such as teaching environmentally significant ecological concepts, providing opportunities for learners to achieve environmental sensitivity, teaching analysis, and citizenship skills, and increasing learners' expectancy of reinforcement for acting in responsible ways.

The Hungerford and Volk model, often referred to as the "Hungerford and Volk Environmental Education Model," is a framework for eco-education that was developed by Robert A. Hungerford and Trudi L. Volk. This model is widely recognized and has been used by educators, environmentalists, and researchers in the field of eco-education. It provides a structured approach to designing and implementing environmental and eco-educational programs, practices, and curricula development.

Through its use and application, the Hungerford and Volk Environmental Education Model has allowed researchers in the field of environmental and eco-education often draw upon the model's principles when conducting studies related to eco-educational effectiveness, curriculum development, and pedagogical approaches. Among these are William B. Stapp, Gerald A. Lieberman, Gregory A. Smith, Marc J. Stern, and Richard C. Simmons.

Hunger and Volk described a complex mix of twelve major and minor variables contributing to an individual's environmental behavior (Hungerford & Volk, 1990). While no single variable is descriptive of a spiritually oriented Eco-Education, a systematic combination of variables concludes

spirituality as vital for Eco-Education. this model positions Divinity at the core of eco-thinking, balancing out the transcendent and mundane, soul and matter, promoting a modest lifestyle, while ingraining piety into environmental care and re-wiring people's discipline to their attitudes to earth.

Hitzhusen identifies various spiritual elements that can catalyze educational variables leading to environmental citizenship behaviors. These include a sense of awe and wonder at God's creation, reinforced religious attitudes, love for creation, knowledge of environmental justice, embracing stewardship vocations, understanding moral and ethical principles, religious commitment, a sense of calling for environmental activism, faith and hope, participation in God's work, moral imperatives, and a legacy of social action and ethical influence (Crowe, 2013, 77). No single variable is expected to sufficiently transform environmental attitudes, and a responsible combination of factors is more likely to be successful, with spiritual elements enhancing overall success (Crowe, 2013, 78).

4. Muslim Spirituality

There exists today a growing literature on Muslim environmental theology, shown for example, in courses and training modules designed to improve Muslims' environmental awareness. However, to understand the connection of Islamic spirituality with Eco-Education, I shall first shed light on the concept and nature of Muslim spirituality.

According to the Qur'an, the realm of the spirit (*ruh*) is described as inaccessible, with humans having limited knowledge of it (Qur'an 17:85). However, when we use the term *ruhaniyyah*, commonly translated as spirituality, Seyyed Hossein Nasr provides a definition that characterizes it as the inner spiritual dimension found in traditional religions. This dimension deals with the noumenal and formless aspects of spirituality, which can be directly experienced and extend beyond the confines of mental categories. Importantly, Nasr emphasizes that this spirituality is not anti-intellectual (Nasr, 2006, 209).

Islamic spirituality is a multi-dimensional and multifaceted concept (Utz, 2011), reflecting the diversity, richness, and

complexity within the Islamic tradition. It encourages self-discovery and self-mastery while freeing individuals from the bonds of greed and self-centeredness. It commences with the pursuit of knowledge about the divine and is closely associated with life-long learning. Moreover, Islamic spirituality is not inherited nor bestowed on any discriminative factors such as genealogy, color, social class, race, or gender.

Rooted in a profound connection with Allah, this spiritual dimension transcends material concerns, influencing self-worth, life's meaning, and connections with others and nature. Islamic spirituality, extending beyond the pursuit of inner peace, engages with fundamental ethical and existential questions, striving to reshape individuals amidst worldly temptations and confront materialism. It seeks to redefine personal satisfaction, purpose, and the pathways to achieve them (Bensaid & Jumahat, 2021, 673). Islamic spirituality draws upon the centrality of God, the malleability of the universe, and the concept of stewardship of the Earth. It views nature as both a gift and a trust from the divine that should neither be sanctified nor enshrined in any form. As a result, Islamic spirituality discourages practices such as sacred offerings to nature (*tabarruk*), witchcraft, sorcery, divination, omens, fortune-telling, as well as the wasteful or destructive use of natural resources.

Muslim spirituality involves diverse discussions and personal experiences related to self-cultivation, virtue, and inner purification. It guides individuals to resist temptations, greed, and worldly attachments, emphasizing vigilance against doubtful acts and excess. Ultimately, it aims to safeguard the human heart and mind from corruption. Within the Muslim community, spirituality is seen as a practical, affordable, and flexible framework for ethical sustainable living. In contrast to external regulations, it emphasizes personal wellness, character improvement, and intrinsic spiritual-based accountability. Actions stem from internal convictions, highlighting the importance of individual motivation and genuine interest in environmental well-being.

Islam places profound importance on concepts like reform (*islah*), trust (*amanah*), settlement (*tamkin*), vicegerency (*istikhlaf*),

and human association (*'umran*). Islamic spirituality harmonizes these principles to synergize human motivations and interactions with the environment, aiming for improved well-being of individuals, communities, and nature. Advocating for the preservation of core values—beliefs, life, progeny, honor, dignity, intellect, wealth, freedom, justice, the environment, and human relationships—Islamic spirituality is dedicated to establishing and upholding the means to attain, sustain, and celebrate these values. The Maqasid al-Shari'ah (higher maxims of Islamic law) and legal maxims (*al-qawa'id al-fiqhiyyah*) work to minimize harm to humans and nature, preventing corruption, destruction, inconvenience, and ensuring the well-being of both humanity and nature.

Cooperation holds a central place in Islamic spirituality, emphasizing community-based ethics, social responsibility, and communal care. Islam promotes cooperation and mutual support to fulfill spiritual and moral responsibilities, nurturing strong social bonds, encouraging acts of servitude, fostering religious community, and endorsing qualities like patience, forbearance, and solidarity. Islamic teachings stress an indiscriminate and unconditional call to assist others, validating one's religiosity and spirituality through acts of service, aid, and empathy (Bensaid and Tekke, 2018, 108). This comprehensive dimension of Islamic spirituality, exemplified by respecting the elderly, showing compassion to the young, and caring for the destitute and needy, not only enhances individual character but also lays the groundwork for a just and socially responsible community. Members are spiritually compelled to support one another in their moral journeys and ethically address societal challenges.

Muslim spirituality emphasizes communal participation in religious and spiritual practices, both public and private. Core devotional practices, including daily prayers, fasting, pilgrimage, Friday congregational prayers, *Eid* prayers, and more, form an integral part. Beyond rituals, Muslims are encouraged to engage in various religious activities with a focus on social responsibilities like supporting the poor, offering donations, caring for orphans and widows, advocating for the oppressed, displaying kindness to animals, and environmental preservation.

The scope of spiritual participation is broad and personal, allowing room for creativity and personal contribution while being connected to larger communal social ethics. Muslims are directed to observe personal purity (*tahara*), maintain hygiene, care for green spaces, consume permissible food, adopt virtuous names, denounce occult practices, and reject superstition and pessimism.

Participation in spiritual activities is pivotal in Eco-Education, especially within Islam, emphasizing cooperation and mutual support for virtue (Qur'an, 5:2). The Qur'anic *'ta'aruf'* stresses understanding one another, suggesting that *'insan'* (human) is derived from '*'uns'* (fellowship), indicating an inherent inclination towards fellowship. Ethicists like Ibn Miskawayh argue that meritorious virtues find fulfillment through social participation and engagement in community life (Omar, M. N, p. 82-83). Ibn Khaldun emphasizes cooperation to establish order in human communal structures (Ibn Khaldun, 1967). Islamic spirituality's social ethics promote interconnectedness, responsibility, and ethical conduct, offering a holistic and sustainable approach to Eco-Education. Muslims are encouraged to embody diverse social ethics encompassing all aspects of life, intersecting with micro and macro environmental concerns. This ethical framework is crucial for developing spiritual Eco-Education programs, nurturing the community's spiritual connection with the environment, and scrutinizing environmental beliefs, assumptions, and attitudes.

4.1. *Meaning and Purpose*

Spiritually guided Eco-Education involves multi-dimensional and multifaceted engagements aimed at fostering personal spiritual development and exploring profound meanings, inspiration, and motivation, initially at the individual and later communal levels. It is essential to emphasize that spiritual growth aligns with acknowledging and celebrating diverse forms of spiritual contributions, recognizing each individual's spirituality as pivotal in promoting responsible stewardship of natural resources. This section highlights how Islamic spirituality provides individuals with a conscious understanding of meaning and purpose, shaping

thoughts, emotions, and attitudes towards a higher power (Meyer & Herscovitch, 2001). Spirituality, viewed as a continuous struggle in search of life's meaning, motivates individuals to discover direction and a heightened appreciation for life and ecosystems, inspiring them to find a particular purpose that gives meaning, stimulation, and survival (Javanmard, H. 2012).

The pursuit of meaning and purpose delves into existential questions, shaping convictions, attitudes, and conduct in relation to life's entirety. In Islamic spirituality, life's purpose centers around the Unity of God, intricately connecting the spiritual with the material and the temporal with the eternal. At its core is the principle of believing in One Creator, known as "tawhid."

Tawhid, the doctrine of God's absolute unity in Islam, asserts that God only deserves worship, establishing a foundation for individual and communal motivations, gratitude, humility, and care (Qur'an, 17:37; 18:92-99). From Tawhid, the belief in human freedom, responsibility, and accountability logically follows. Islam teaches that humans are created in the finest form, endowed with reason and appointed as stewards of the Earth (Qur'an, 27:40, 27:18-19; 17:37; 18:92-99; 30:41).

Islamic spirituality involves contemplation of nature and the world, fostering a profound connection with the Creator and creation. It refines convictions and attitudes, providing followers with purpose and inner motivation. This spiritual path infuses actions with profound meaning, permeates cognitive and emotional dimensions, and enhances a sense of fulfillment. Rooted in purification, self-discipline, and introspection, it eradicates vices like selfishness and greed while reinforcing qualities of goodness and virtue. Islamic spirituality aims to cultivate the inner self, refining and elevating character, and steadfastly commits to safeguarding and nurturing the environment. It respects others' rights, judiciously manages resources, and actively avoids actions causing environmental degradation, minimizing one's environmental footprint.

In Islam, the emphasis is on purifying and transforming the inner self as the cornerstone of change and the pursuit of goodness in both substance and form. The faith advocates for self-examination, scrutiny of motives, exploration of personal drives,

and the refinement of actions and behaviors. Through devotional practices like prayer, remembrance, and the glorification of God, along with meditation, spirituality aims to facilitate deep introspection, cultivate virtuous character, and strengthen community bonds. This underscores the idea that true Eco-Education originates from within—the inner self serving as the wellspring of motivation and drive for environmental protection. Spirituality serves as a guiding light, bestowing individuals with a profound sense of spiritual and moral worthiness. It transforms the perception of worldly possessions and provides purpose to actions, bridging the gap between temporal existence and the transcendental realm. Spirituality acknowledges both inner faculties and external circumstances, recognizing the boundless potential of human beings, encompassing their creativity and vulnerabilities. Consequently, it emerges as a potent catalyst for change and transformation.

Within this context, what holds paramount importance for Muslims is the attainment of God's satisfaction, aligning life's purpose with the pursuit of God's will (Musrifah, 2019). This invokes conscious duties and responsibilities towards oneself, one's work, and life. However, the challenge is not solely about investing in spirituality for better living conditions. It also pertains to how environmental stewardship can harness spiritual capital to foster meaningful, responsible, and sustainable management practices.

Stewardship involves intrinsic and extrinsic motivations, influencing choices and actions by defining the "what," "why," and responsibilities of stewards (Bennett et al., 2018). Ethical considerations in stewardship may arise from a moral responsibility to a higher power for the care of creation (Van Dyke et al., 1996). Factors such as infrastructure, technology, finance, wealth, rights, knowledge, skills, and leadership contribute to communities' capacity for stewardship (Bennett et al., 2018). The concept of earth stewardship is directly intertwined with spiritual discipline. Although earth stewardship is an abstract concept, the teachings of Prophet Muhammad shed light on its significance: "If the Resurrection were established upon one of you while he has in his hand a sapling, then let him plant it" (al-Wadi'i, 1990, 34). It

is further reinforced by teaching that when a Muslim plants any vegetation and a human being or an animal benefit from it, the planter is rewarded as if they had given that much in charity (al-Yamani, 1991, 382). The Prophet Muhammad is also reported to have stated: "There is none amongst the Muslims who plants a tree or sows seeds, and then a bird, or a person or an animal eats from it but is regarded as a charitable gift for him" (Bennett et al., 2018). In essence, Muslim spirituality places a strong emphasis on the intrinsic worth of environmental stewardship, driven by a sense of personal responsibility and reward, as well as a desire to maintain harmony and balance in the natural world.

Spirituality profoundly influences environmental stewardship by framing the Earth and its resources as a gift and trust to be protected, sustained, and enhanced. It fosters harmony with the universe, intimacy with the Earth, and fellowship with humans. Spirituality promotes inner and outer discipline, transforming vices into virtuous acts through principles like *takhliyat al-nafs* (emptying wrong) and *tahliyat al-nafs* (filling with good). This framework instills responsibility for future generations and concerns about the afterlife, as reflected in the Prophet's hadith. Ibn Mas'ud, the Prophet stated that individuals will be questioned about five matters on the Day of Resurrection, including how they lived their lives, expended their youth, earned, and spent their wealth, and acted upon their knowledge (Sunan al-Tirmidhi, 2416).

Furthermore, spirituality reinforces the ethical basis for actions, encompassing the five Islamic legal values to protect Muslims from engaging in prohibited actions that may result in abuse, exploitation, waste, or resource destruction. Instead, it encourages obligatory and desirable acts focused on protection and responsible conservation. Spirituality, as an endeavor of inner and outer discipline driven primarily by the pursuit of God's pleasure, guides decision-making processes toward choices that are inherently beneficial, community-oriented, compassionate, and aimed at curbing harm and chaos while providing relief to others. As articulated by Imam Ibn Qayyim:

{...} Verily, the foundation and basis of the Sharia are built upon justice and the welfare of God's servants, both in this life and the

hereafter. It is all about justice, mercy, benefit, and wisdom. Any matter that deviates from justice becomes tyranny, and anything contrary to mercy becomes its opposite. Anything that goes against benefit becomes harm, and anything devoid of wisdom turns into futility. Such matters are not part of the Sharia, even if they are introduced through misinterpretation. The Sharia is God's justice among His servants, His mercy to His creation, His shade upon His land, and His guiding wisdom, as demonstrated by the truthful guidance of His Messenger, peace be upon him, the most complete and truthful guidance..." (Ibn al-Qayyim, *I'lam al-Muwaqqi'in*. 3: 14-15).

4.2. Knowledge and Skills

Eco-Education benefits from spirituality's comprehensive perspective, integral to environmental management, development, monitoring, and evaluation. Rooted in environmental protection and stewardship, spirituality provides Eco-Education with tools for auditing environmental impact, emphasizing spiritual values like perfection (*itqan*), excellence (*ihsan*), reflection (*tafakkur*), self-accounting (*muhasabah*), meditation (*muraqabah*), repentance (*tawbah*), spiritual exercise (*riyadah*), and the expiation of sins (*kaffarah*).

Eco-Education aims to develop knowledge, capacity, competencies, and skills for identifying and addressing environmental challenges, bridging theory and practice to achieve ecological impact. However, it raises complex questions about education's instrumentality in environmental protection. How do different fields contribute to Eco-Education, and how do assessment methods measure the effective functionality of environmental knowledge and skills, considering their connections with morality and spirituality? These questions gain significance as Eco-Education focuses on cultivating a responsible environmental attitude, emphasizing the need for a holistic and multidisciplinary approach.

The critical concern lies not only in acquiring knowledge and skills to address environmental challenges but in shaping and enhancing a holistic perspective to handle life's complexities, including environmental issues. The focus is on identifying catalysts that integrate diverse knowledge and skills into a

coherent whole, facilitating the effective application of Eco-Education. Additionally, the question revolves around how education and skills adapt to evolving environmental problems and changing scenarios.

To comprehend this concept, it's important to recognize that Islamic spirituality is inherently not anti-intellectual; it views education essentially as piety, considering every step towards the education of the self, others, and about the environment as a virtue. Islamic spirituality further promotes continuous learning and the acquisition of skills. Within the scope of spiritual practice, Muslim scholars agree that devotion to learning is a worthwhile cardinal virtue and even preferable to many other additional spiritual acts. This perspective is grounded in the belief that Islam highly elevates the status of knowledge, emphasizing its positive impact on individuals and their surroundings.

The Qur'an criticizes those with knowledge but no action, likening them to a donkey burdened with tomes it cannot understand (Qur'an, 62:5). Islam promotes financial independence, resourcefulness, and impactful charities, emphasizing the avoidance of prolonged grief, weakness, miserliness, cowardice, and debt, as stated in Prophet Muhammad's supplication.

Spirituality acts as a catalyst for the mental and personal attitude required for learning and skills development, utilizing education to improve one's conditions in the service of society and enhancing the interaction and management of the environment. This aligns with the principle of multiplied spiritual merits placed on invested time and resources in education, learning, and skills, as well as virtues associated with affiliation with circles of scholarship and learning pathways. Besides providing meaning and direction to the process of skills learning, spirituality generates and sustains the motivation necessary for the practice of knowledge in various environmental domains.

Spirituality in Islam aligns learning with spiritual practice, promoting divine satisfaction, positive community well-being, and environmental protection. Emphasizing beneficial knowledge and its practical application, spirituality serves as an

enduring devotional exercise and a framework for meritorious acts.

Spirituality forms the core of responsible environmental attitudes, significantly influencing Muslims' motives for learning and practicing environmental knowledge. The reciprocal relationship between spirituality and eco-investment implies that the environment benefits from spirituality as it reflects positive environmental practices. In line with Islamic theological notions, faith is intimately connected with practice, with spirituality fluctuating based on the quantity and quality of environmental behavior. This perspective suggests that the relationship between spirituality and Eco-Education is poised to thrive, given the inherent pathways related to the environment and the broader outlook on life within the Islamic framework.

4.3. Earth Discipline

The imperative for humanity to re-establish its connection with the Earth is exemplified within Islam through its profound focus on fundamental themes, notably the unity of creation, human stewardship, and a holistic perspective on worship. The conviction that humankind was created from various earthly elements - dust, clay, black mud, and wet earth (Qur'an 23:12) - fosters a profound appreciation for the Earth's intimacy (Qur'an 71:17-20). These beliefs serve as catalysts for nurturing a resilient eco-spiritual ethos, one that is impervious to greed, hostility, abuse, and the reckless depletion of planetary resources.

Within Islam, principles reflecting a thriving spiritual consciousness toward the Earth are evident. These include teachings on soil purity, responsible water-use in purification rituals, substituting water with stone or dust in ablution, recognizing water's healing significance, the sanctity of the Zamzam well in pilgrimage, and invocations during rainfall. Prophet Muhammad's statement emphasizes Earth's sacredness and purity (Earth has been made sacred and pure and a mosque for me, so whenever the time of prayer comes for any one of you, he should pray wherever he is), designating it a mosque. These spiritual practices foster cognitive and emotional conditions for environmental consciousness, influencing individuals and

communities towards environmental responsibility and profound reverence for nature (Ibn Hazm, (n.d). 7: 148).

Muslim religious supplications extend to various weather conditions, including rainfall, snow, windstorms, lightning, thunder, fire, earthquakes, extreme temperatures, calamities, and disasters. Special prayers are specifically designated for rainy seasons and eclipses, underscoring the Islamic tradition's profound connection to Earth and its intricate environmental nuances.

Islam's profound concern for the Earth is evident in its sanctification of Makkah and Medina. These areas, declared inviolable sanctuaries by the Prophet Muhammad, prohibit harm to trees and animals. A tradition attributes to Prophet Muhammad emphasizes this principle: "Ibrahim declared Mecca as sacred; I declare Medina, that between the two mountains, as inviolable. No tree should be lopped, and no game is to be molested" (Albani, 1987).

The Qur'an references 'earth' 545 times, emphasizing our connection to Earth and its resources (Qur'an, 6:99, 6:141). It links human habitation on Earth to belief, piety, repentance, and personal reform (Qur'an, 11:61). Caring for the Earth, responsible stewardship, and resource preservation are integral to faith, considered continuous acts of charity leading to paradise, expiation of sins, and goodness (Qur'an, 7:85). Conversely, despoiling the Earth invites divine wrath (Qur'an, 28:77).

The concept of Earth discipline in Islam encompasses various norms, attitudes, lifestyles, and resolutions grounded in the discipline of the soul. Islamic ethical life, as asserted by Jurjani, is deeply ingrained in the soul, leading to effortless virtuous acts (Al-Saqqaf, 1:11-12). Ethical values include virtue (*fadila*), goodness (*ma'ruf/khayr*), truth (*haqq*), 'justice (*'adl*), mercy (*rahma*), righteousness (*birr*), cooperation (*ta'awun*), truthfulness (*sidq*), trust (*amanah*), fairness (*qist*), honoring commitments (*'ahd*), reform (*islah*), contentment (*rida*), asceticism (*zuhd*), waste prevention, moderation.

The Qur'an emphatically condemns corruption on Earth, warning against abusive and malevolent actions (Qur'an, 2:60; 7:56). It attributes corruption to human deeds (Quran, 30:41) and

links servitude to God (*Ubudiyyah*) with a humble and considerate Earthly demeanor (Qur'an, 25:63). In contrast, actions causing environmental harm, such as wastefulness, pollution, and injustice, contradict the principles of servitude, spiritual judgment, and righteous conduct.

Islam ardently advocates responsible stewardship of the Earth, emphasizing avoidance of actions causing harm or corruption in both the environment and society. Rooted in the Qur'an and Sunnah, Islamic jurisprudence calls for the elimination of harm and its causes, urging preemptive measures and choosing lesser harm when major harm is inevitable. While encouraging land investment, Islam cautions against neglecting agricultural land and warns against practices that harm ecosystems, such as excessive exploitation and injudicious use of harmful substances like chemical fertilizers.

Islam advocates responsible land utilization and highlights environmental stewardship, urging individuals to contribute to the revival of barren or neglected areas. The concept of "ihya al-mawat" promotes the rejuvenation of fallow, dead, or uncultivated land, allowing ownership by providing evidence of rehabilitation. This encompasses barren land with no apparent owner and land that is incapable of yielding crops or vegetation. This principle aligns with the Prophetic report: "Whosoever quickens a dead land, it is his" (Albani, 1987, no. 5975), emphasizing earth discipline and the role of individuals in benefiting society and the Earth.

Jurists offer varied perspectives on ownership of rehabilitated land, some contending that ownership remains with the state, while individuals can acquire rights through rehabilitation. Hanafi jurists emphasize the requirement of dead land being distant from human settlements (Aji, n.d.).

Stewardship of animals is integral to spiritually informed Eco-Education in Islam, extending compassionate treatment to animals as part of communities akin to humans (Qur'an, 6:38). Prophet Muhammad's teachings explicitly prohibit harmful activities towards animals, emphasizing care, kindness, and gentleness. Prohibitions include using living creatures as shooting targets, causing harm, inducing fear, torturing, dragging,

mutilating, branding, and fighting animals for sport. The Prophet's Sunnah highlights the importance of handling animals with care. Islamic teachings forbid slaughtering milking sheep, killing birds or animals without clear benefit, or shooting any creature with a soul for practice. Even non-hazardous creatures like ants, bees, and frogs are not to be killed without reason. This comprehensive approach underscores Islam's emphasis on compassionate and ethical treatment of animals, aligning with principles of responsible stewardship and Eco-Education rooted in spirituality.

Prophet Muhammad's compassion towards animals is vividly illustrated in his actions. When his companions captured two young birds and the mother bird showed distress, he immediately directed them to return the young ones. Witnessing the burning of an ant village, he rebuked the responsible parties, asserting that fire should only be used by the Lord of Fire (i.e., God). The Prophet's teachings underscore the importance of kindness and consideration for all living beings, offering practical advice on gentle animal handling. His emphasis on displaying mercy during animal slaughter, with the reciprocal promise of Allah's mercy, highlights the spiritual significance of treating animals with care. The Prophet's prohibition against unjustified killing of small birds emphasizes the moral and ethical responsibility to avoid causing harm to innocent creatures. According to a reported statement, birds killed without reason will beseech God on the Day of Resurrection, invoking accountability for such actions. This teaching carries a profound message, emphasizing that human actions, even towards seemingly insignificant creatures, are subject to divine scrutiny. Overall, Prophet Muhammad's actions and teachings serve as a poignant reminder of the spiritual duty to treat animals with compassion, respect, and an understanding of their intrinsic value.

5. Conclusion

Spirituality integrates seamlessly with Eco-Education, influencing its core, vision, and methodology. Positioned as an intrinsic and ethical practice, it seeks to redefine education and responsible

behavior by redirecting focus inward, reshaping beliefs towards higher meanings and purposes. Its objective is to assess humanity's role on Earth, scrutinize practices fostering inner growth, and enhance individuals' contributions to their surroundings. Emphasizing moderation in production, consumption, and distribution, spirituality harmonizes students' relationships with the environment, enriching Eco-Education as a holistic approach to daily living.

In creating a spiritually grounded Eco-Education curriculum, it is crucial to delineate operational boundaries between Sufism (mysticism) and spirituality for education. While Sufism provides valuable insights and educational practices rooted in Muslim spiritual theories, it may not be the sole ideal framework for Eco-Education. The diversity within Sufi practices necessitates critical evaluation and adaptation. By adhering to operational boundaries, a spiritually based Eco-Education curriculum becomes a critical exercise, respecting the rich Muslim spiritual heritage and aligning it with environmental responsibility and sustainable education goals.

Crucial considerations for integrating diverse perspectives into Eco-Education curriculum development include: 1) Recognizing Muslim spirituality's native domain, tied to piety, well-being, and development; 2) Adopting a holistic approach to spiritual themes, avoiding compartmentalization or secularization, viewing them as a human engagement with the divine and commitment to restoring order; 3) Acknowledging intrinsic pathways connecting spirituality and various facets of Eco-Education; 4) Avoiding idealization of individual experiences or introducing unwarranted mystical elements; 5) Re-evaluating detrimental spiritual concepts; 6) Promoting dialogue among stakeholders for effective spirituality integration.

This study advocates for an inclusive spiritual-based Eco-Education module designed for the diverse Muslim public, irrespective of minority or majority status or geographic location. The module integrates spirituality and morality to improve interpersonal ethics, foster social interconnectedness, and reinforce commitments to Eco-Education. Central to this approach is the role of innovation (ijtihad) in spiritual reform and

the function of spiritual creativity in reshaping affective, behavioral, and cognitive patterns related to Eco-Education and sustainability. The module seeks to transcend regional and socio-economic disparities, making it accessible and impactful across various contexts.

Traditionally, Muslims have viewed spiritual themes as personal and religious matters, often missing the potential for innovation, especially in light of historical practices of early Muslim communities. Eco-Education necessitates an innovative approach to spiritual literature, encompassing content, style, and experiential aspects. This approach should adapt to evolving changes, re-evaluating the contemporary Muslim spiritual landscape and associated pedagogical frameworks. It must consider current spiritual experiences, challenges, and responses to global sustainability issues. A holistic perspective is crucial for understanding how spirituality can actively contribute to shaping a sustainable future, bridging the gap between traditional approaches and the demands of contemporary Eco-Education.

Establishing an effective spiritual-based Eco-Education framework requires a comprehensive paradigmatic shift encompassing various steps. This includes aligning spiritual experiences with Eco-Education principles, reformulating pedagogical approaches for relevance, and exploring intricate relationships between Muslim spirituality, transmitted experiences, Islamic law, theology, and ethics for harmonious integration. Additionally, leveraging existing expertise from Eco-Education literature and environmental matters enriches the development of the spiritual-based curriculum. Recognizing the need for a social, legal, and spiritual turn is crucial, emphasizing a holistic approach that goes beyond mere recontextualization of spiritual experiences.

The holistic integration of spirituality into Eco-Education emphasizes the importance of a comprehensive strategy. This strategy should extend beyond the spiritual dimension, aiming to bridge and synergize spiritual education with other eco-oriented pedagogies and ethical principles. By adopting this inclusive approach, spiritual-based Eco-Education becomes seamlessly

woven into the broader fabric of education, promoting a more interconnected and impactful learning experience.

References

Aji, Hassan H. (n.d.) *Land Management and Ownership in Northern Nigeria In An Islamic Perspective Background of The Study*, Academia. Oct. 31, 2021. www.academia.edu/30554203.

Albani, M, Nadirudin. 1987. Sahih al-Jami' al-Saghir wa-ziyadatuh. Ed. 3. Ed. Zuhayr al-Shawish.Beirut: al-Maktab al-Islami. 5975.

Al-Saqqaf, 'Alawi bin 'AbdulQadir. (n.d.). Ed. Mawsu'at al-Akhlaq, al-Durar al-Sunniyyah, 1: 11-12.

Athman, J. A., & Monroe, M. C. (2001). Elements of Effective Environmental Education Programs.

Behan, J. R., Richards, M. T., & Lee, M. E. (2001). Effects of Tour Jeeps in a Wildland Setting on Non-motorized Recreationist Benefits. Journal of Park & Recreation Administration, 19 (2).

Bensaid, B. & Machouche S. (2013). Exploring the relationship between Islamic religious learning and community: Special reference to 'Abdul Rahman Ibn Khaldun and Mohammad Tahir Ben Achour. *Multicultural Education & Technology Journal.*

Bensaid, B. & Jumahat T. Crossroads between Islamic Spirituality and the Fourth Industrial Revolution. Bogoslovni vestnik/Theological Quarterly 81 (2021) 3, 669 — 680

Bensaid, B., & Tekke, M. (2018). Islam and Prejudice: Special Reference to Gordon W. Allport's Contact Hypothesis. *Kemanusiaan: The Asian Journal of Humanities*, 108.

Boeve-de Pauw, J., & Van Petegem, P. (2011). The effect of Flemish eco-schools on student environmental knowledge, attitudes, and affect. International Journal of Science Education, 33(11), 1513-1538.

Conde, M. D. C., & Sánchez, J. S. (2010). The school curriculum and environmental education: A school environmental audit experience. International Journal of environmental and science education, 5(4), 477-494.

Coertjens, L., Boeve-de Pauw, J., De Maeyer, S., & Van Petegem,

P. (2010). Do Schools Make a Difference in their Students' environmental Attitudes and Awareness? Evidence from PISA 2006. International Journal of Science and Mathematics Education, 8 (3), 497-522.

Cremo, M. A., & Goswami, M. (1995). Divine nature: a spiritual perspective on the environmental crisis. Bhaktivedanta Book Trust.

Crowe, J. (2013). Transforming Environmental Attitudes and Behaviours Through Eco-spirituality and Religion. International Electronic Journal of Environmental Education, 3 (1), 75-88. Retrieved from https://dergipark.org.tr/en/pub/iejeegreen/issue/7908/104090.

English, L. M., & Gillen, M. A. (2000). Addressing the spiritual dimensions of adult learning: What educators can do? Jossey-Bass.

Francis, P. (2015). Laudato si. *Vatican City: Vatican Press, May 24*.

Fortier, J. D., Grady, S. M., Lee, S. A., & Marinac, P. A. (1998). *Wisconsin's Model Academic Standards for Environmental Education. Bulletin No. 9001*. Wisconsin Dept. of Public Instruction, Publication Sales, Drawer 179, Milwaukee, WI 53293-0179.

Gillett, M. (1977). The Tbilisi Declaration. McGill Journal of Education/Revue des sciences de l'éducation de McGill, 12 (002).

Global Development Research Center. (2017). The Belgrade Charter. http://www.gdrc.org/uem/ee/belgrade.html

Haluza-Delay, R. (2000). Green fire and religious spirit. Journal of Experiential Education, 23(3), 143-149.

Hitzhusen, G. (2006). Religion and environmental education: building on common ground. Canadian Journal of Environmental Education, 11, 9-25.

Hobert, T. M. (2010). A follow-up study of Eco Education's environmental service-learning program.

Hungerford, H. & Volk, T. (1990). Changing learner behavior through environmental education. Journal of Environmental Education, 21, 8-24.

Ibn Hazm, A. bin Ahmad. (n.d). Al-Muhalla bil Athar, Ed. Ahmad

Shakir. Beirut, Lebanon: Dar al-Jil. 7: 148.

Khaldun, I. (1967). The Muqaddimah: An introduction to history, trans. *Rosenthal F*.

Jirásek, I., Veselský, P., & Poslt, J. (2017). Winter outdoor trekking: spiritual aspects of environmental education. Environmental Education Research, 23(1), 1-22.

Javanmard, H. (2012). The impact of spirituality on work performance. Indian Journal of Science and Technology, 5(1), 1961-1966.

Johnson, B., & Manoli, C. C. (2008). Using Bogner and Wiseman's Model of Ecological Values to measure the impact of an earth education programme on children's environmental perceptions. Environmental education research, 14(2), 115-127.

Kastenholz, H. G., & Erdmann, K. H. (1994). Education for responsibility within the framework of UNESCO. The Journal of Environmental Education, 25(2), 15-20.

Khalid, Fazlun M., (2002), "Islam and the Environment, in Social and Economic Dimensions of Global Environmental Change," Encyclopedia of Global Environmental Change, Vol. 5, 332-339.

Locke, S., Russo, R. O., & Montoya, C. (2013). Environmental education and eco-literacy as tools of education for sustainable development. Journal of Sustainability Education, 4(1), 1-13.

Meyer, J. P., & Herscovitch, L. (2001). Commitment in the workplace: Toward a general model. *Human resource management review*, *11*(3), 299-326.

Mezirow, J. (1997). Transformative learning: theory to practice. New Directions for Adult and Continuing education, 74, 5-12.

Mezirow, J. (2000). Learning as transformation: Critical perspectives on a theory in progress. New York: Jossey-Bass.

Muhammad b. al-Yamani. 1991. al-Nawafi al-'Atirah fil-Ahadith al-Mushtahirah. Ed. 1. Ed.

Muhammad A. 'Ata. Beirut: Mu'assast al-Kutub al-Thaqafiyyah. no. 382

Muqbil b. al-Wadi'i. 1990. Al-Sahih al-Musnad mimma laysa fil-Sahihayh. Ed. 1. Sanaa, Yemen: Maktabat Dar al-Quds, 34.

Muslim, bin al-Hajjaj al-Naysaburi. 1954. Sahih Muslim. Ed. 1, Ed. Muhammad F. 'AbdulBaqi. Cairo, Egypt: Dar Ihya' al-Kutub al-'Arabiyyah, 1362.

Musrifah, M. (2019). The Relevance of Al-Ghazali's Tazkiyatun-Nafs Concept with Islamic Education in The Millennial Era. Nadwa, 13(1), 15-30.

Nasr, Hossein Seyyed. 2006. Spirituality and Science Convergence or divergence? In: Seyyed Hossein Nasr and Katherine O'Brien, eds. The Essential Sophia, 207–218. Bloomington: World Wisdom, Inc.

Nathan J. Bennett, Tara S. Whitty, Elena Finkbeiner, Jeremy Pittman, Hannah Bassett, Stefan Gelcich, Edward H. Allison. (2018). Environmental Stewardship: A Conceptual Review and Analytical Framework. in Environmental Management, Volume 61, Issue 4, pp 597–614).

Omar, M. N. (2016). Islamic Social Ethics: An Analysis of Miskawayh's Thought. European Journal of Multidisciplinary Studies, 1 (1), p 83.

Palmer, J. (2002). Environmental education in the 21st century: Theory, practice, progress and promise. Routledge.

Roth, C. E. (1968). On the Road to conservation. Massachusetts Audubon, June 1968, pp.38-41.

Sadik F. and Sadik S. (2014). Procedia - Social and Behavioral Sciences 116, 2379–2385). p. 2382.

Sardar, Ziauddin. (1985). Islamic Futures. New York: Mensell Publishing Limited.

Skamp, K. (1991). Spirituality and environmental education. Australian Journal of Environmental Education, 7, 79-86.

Stapp, W. B., Bennett, D., Bryan, W., Fulton, J., MacGregor, J., Nowak, P., & Havlick, S. (1969). The concept of environmental education. *Journal of environmental education*, *1*(1), 34.

Thathong, K. (2012). A spiritual dimension and environmental education: Buddhism and environmental crisis. Procedia-Social and Behavioral Sciences, 46, 5063-5068.

Tisdell, E. (2003). Exploring spirituality and culture in adult and higher education. San Francisco: Jossey-Bass.

Tolliver, D. & Tisdell, E. (Spring, 2006). Engaging spirituality in the transformative higher education classroom. New Directions for Adult and Continuing Education, 109, 37-47.

Trainor, S. F., & Norgaard, R. B. (1999). Recreation Fees in the Context of Wilderness Values. Journal of Park & Recreation Administration, 17(3).

UNESCO (1980). Environmental education in the light of Tbilisi Conference. Paris, France: UNESCO. 100 p. Online: http://unesdoc.unesco.org/Ulis/cgiin/ulis.pl?catno=3855 0 &gp=0&lin=1&ll=1

Withgott, J. & Brennan, S. (2008). Environment: The science behind the stories, 3rd Ed. San Francisco: Pearson Education.

Scoullos, M., Alampei, A., & Malotidi, V. (2004). The Methodological framework of the development of the educational package "Water in the Mediterranean". Chemistry Education Research and Practice, 5(2), 185-206.

UNESCO, T. D. (1978). Intergovernmental conference on environmental education. *Final Report. Paris*.

Utz, Aisha. 2011. Psychology from the Islamic perspective. Riyadh: International Islamic Publishing House.

Van Dyke, F. H., Mahan, D. C., Sheldon, J. K., & Brand, R. H. (1996). Redeeming creation: the biblical basis for environmental stewardship. InterVarsity Press.

Wilbur S. J. Nature Study for the Common Schools. 1894. New Work, USA: H. Holt and company.