

Assessing the Willingness to Accept Sustainability Learning in Management and Operations in Tanzania: A Comparative Approach

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Abstract

This study assessed the willingness to accept sustainability learning in management and operations. Based on comparative analyses of responses from different functional areas, the study specifically assessed the readiness to accept the proposed sustainability-related themes to be learned, the likelihood of the trained personnel to benefit from sustainability-related skills and competencies, and the employability potentials of beneficiaries of sustainability learning. The study used data collected from 150 practitioners in the areas of management and operations. Analysis of variance was used to compare the differences in responses between the five functional areas. Findings indicate that respondents were willing to accept the proposed areas of sustainability learning. Also, the recipients of sustainability training accepted the likelihood to benefit from the skills and competencies. Moreover, the respondents concurred on the employability likelihood for potential sustainability learners. The study recommends that organizations and businesses undertake specific training to develop sustainability expertise in management and operations to enhance sustainable business operations.

Keywords: Sustainability, Sustainability Learning, Management, Operations

Introduction

Sustainability learning is currently at the forefront of policymakers, academicians, and practitioners' attention and is also considered a tool for imparting sustainability knowledge to enhance sustainable business and operations (Ametepey et al., 2015; Gehlot & Shrivastava, 2022; Hays & Reinders, 2020). Sustainability learning has mainly been seen as a means to develop capabilities for managing options to adapt to the limits and changing conditions enforced by social-ecological systems (Hansmann, 2010; Nobre et al., 2017; Tabara & Pahl-Wostl, 2007). The 2030 sustainable development agenda acknowledges the importance of sustainability learning to spread sustainability knowledge to various stakeholders on different operational levels (Agirreazkuenaga, 2020; Gill, 2019). The current business environment has been characterized by too much pressure from different drivers of sustainability, which highlights the importance of sustainability practices, with consumers opting to pay more for sustainable goods (Wijethilake & Upadhaya, 2020). To respond to these drivers of sustainability, organizations are forced to be proactive in possessing sustainability learning capabilities. Despite the importance and benefits of sustainability and its respective learning, more is needed to know the extent to which target beneficiaries and practitioners of

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sustainability provide their readiness to accept learning on sustainability. Sustainability skill and competence advancement is critical in different organizational functional areas for better achievement of sustainability goals. With this view, it is paramount to assess the willingness to accept sustainability learning at various levels of organizations to evaluate the readiness of the targeted audience to learn and practice sustainability.

Sustainability learning is of critical importance due to the existing gap between business practitioners and sustainability knowledge (Tres et al., 2022). The literature points to a need for more alignment between business strategies and sustainability concepts and a lack of awareness of sustainability practices within different organizational functional areas. Moreover, studies indicate the need for sustainability expertise in most business management and operations. As a result, some managers are not committed to sustainability practices (Bhanot et al., 2015; Siebenhüner & Arnold, 2007; Tres et al., 2022; Wijethilake & Upadhaya, 2020; Zhang & Tavitiyaman, 2022). These sustainability shortfalls are attributed to the fact that most training institutions are still in the infancy stage of developing consistent policies for sustainability training and learning (Dagiliute & Liobikiene, 2015). The existing curriculum in learning institutions does not integrate sustainable development issues for training their customers. This implies that most of the higher learning institution's output lacks sustainability knowledge (Dagiliute & Liobikiene, 2015; Rodriguez-Andara et al., 2018). This creates a gap of expertise in the industry, which needs some induction for people working in various industries and students in higher learning institutions.

Although top management and operational managers are key drivers of implementing sustainability in day-to-day operations, the willingness to accept sustainability in many organizations needs to be better documented (Beckmann et al., 2020; Dagiliute & Liobikiene, 2015). Most of the existing management and sustainability literature neglects the learning and acquisition of new skills and knowledge (Siebenhüner & Arnold, 2007). However, given the importance of sustainability learning in operations and management units, its acceptance in less developed countries, Tanzania is one of them, and still needs to be addressed. In the context of developing countries, more is needed on the studies related to the willingness to accept sustainability learning. Literature indicates inadequate knowledge of sustainability issues in developing countries, specifically low-income countries; this has been a source of unsustainable development (Debrah et al., 2021). Previous studies indicated that acceptance/adoption of sustainability issues such as green technologies had a limited focus on developing countries (Elgin et al., 2022; Grazzi et al., 2019). Furthermore, studies argue that to sustain sustainability issues in developing countries, education on sustainability is inevitable (Debrah et al., 2021). Thus, this study intended to move beyond the well-known understanding from developed countries to developing countries. Furthermore, the study focuses more on the willingness to accept sustainability learning in developing countries contrary to what has been explored by other scholars.

Driven by these challenges, this study assessed the willingness to accept sustainability learning from practitioners in management and operations in Tanzania. Tanzania is one of the developing economies which responded to the calls to realization of the sustainable development goals of the United Nations (UN, 2022; Lauwo et al., 2022; Jönsson & Bexell, 2021). As a member state and implementer of the sustainable development agenda, the need for

developing respective skills and expertise to realize the sustainable development goals in the country becomes paramount. In this regard, the study specifically assessed the readiness to accept the proposed areas of sustainability learning in the fields. The study also assessed the likelihood that the trained personnel would benefit from the potential skills and competencies that will be gained from sustainability learning in the fields. Moreover, the study analyzed the employability potentials of personnel who gained sustainability skills and competencies. These examinations were based on comparative analyses of responses from different functional areas under management and operations fields. This study provides several contributions. First, the study becomes significant as it has addressed sustainability learning as an input to improving the transitioning of management and operations to sustainability. Secondly, the results of this study will provide policymakers with information necessary for sustainability learning and develop policies that will foster the successful implementation of sustainability practices.

Literature review

This part discusses various concepts that were used in this study. It then presents a review of various empirical issues related to this study. The focus was to see how different scholars discuss the concepts in concern, and based on these reviews, the knowledge gaps under this study were established.

Sustainability

There have been many variations and discrepancies by scholars in providing a unified understanding of the concept of sustainability (Ekardt, 2020; Jacobs & Finney, 2019; Janker & Mann, 2018; Epstein & Buhovac, 2017; Alhaddi, 2015). Despite these variations, studies are open to more than certain schools of thought defining sustainability. Literature provides the concept of sustainability from the World Commission for Environment and Development, the Brundtland Commission, 1984, which streamlined the understanding of sustainable development from which sustainability was adopted. The Commission defines sustainable development as development that intends to meet the needs of the present without compromising the ability of future generations to meet their own needs (UN, 1987). Giving an understanding of sustainability in the line of the Commission, Liu et al. (2013) view sustainability in the essence that what we are doing now is not at the expense of the future generation.

Moreover, the literature provides an understanding of sustainability as an integration of environmental, social and economic criteria in undertaking all activities related to sustainable development. These literatures refer the integration of environmental, social, and economic activities as the triple-bottom-line criteria for sustainability (Ekardt, 2020; Epstein & Buhovac, 2017; Azapagic et al., 2016, Atilgan & Azapagic, 2016, Yilmaz & Bakis, 2015). With these orientations to understanding sustainability, this study adopted the integrated approach to sustainability, which focuses on considering environmental, social, and economic criteria in different contexts of organizational and human development activities. All these ultimately contribute to enhancing sustainable development.

Sustainability learning

In endeavours to develop a specific understanding to readers of sustainability learning as the critical subject of this study, we refer to the literature to capture this understanding. Mintz and

Tal (2018) view sustainability learning as the process that intends to impart theoretical knowledge, professional skills, thinking skills, emotional awareness, and attitudes that enable learners to manage complex sustainability problems. Similarly, Hill and Wang (2018) define sustainability learning as providing knowledge, skills, attitudes, and personal values to learners on sustainability. It is the process of imparting knowledge on multiple dimensions of sustainability and abilities to evaluate sustainability through the integration of economic, ecological, and social perspectives. It also involves sustainability thinking across diverse cultural values and the ability to see how sustainability influences the trainees and how their lives impact sustainability.

On the other hand, Sipos et al. (2008) view sustainability learning as a transformative process. They further perceive sustainability learning as the application of various trans-disciplinary pedagogical models to transformation through the head, heart, and hand framework. This is the cognitive, psychomotor, and affective domains of learning regarding sustainability aspects. It entails imparting education to participants that leads to change in knowledge, skills and attitudes to enhance ecological, social, and environmental justice as the bottom-line aspects of sustainability. Moreover, Menon and Suresh (2020) perceive sustainability learning as an endeavour that integrates sustainability activities in teaching, research community outreach, engagement, and operations by universities. This conception had based on the fact that, as the world is putting more emphasis on instilling the sustainable development agenda, universities also need to reorient their thinking to include training on sustainability in their agenda. Consistent with this perspective, sustainability learning is understood here as the learning of individuals and human systems such as groups, organizations, and human societies, which aims to achieve and facilitates sustainability and sustainable development.

Willingness to accept sustainability learning

Since this study had anchored on willingness to learn, a conceptual understanding of the construct is provided. In general terms, willingness to learn is explained as an impulse or desire to choose and engage in the search for information and understanding of various ideas and skills by a person for the self-development of that person (Tan, 2022; Hotifah & Yoenanto, 2020). This study drew on this understanding and reflects it in sustainability learning. Therefore, the authors anchored the study in assessing the desire to choose and engage in searching for information and understanding sustainability by individuals and practitioners in management and operations for their development.

Sustainability learning in management and operations

Sustainability learning is vital to sustainable operations and management in the current era (Wijethilake & Upadhaya, 2020). The literature argues that ‘if people do not have enough knowledge to realize the consequences of their behaviour, it might take ages to change the situation (López-Torres et al., 2019). From a theoretical literature point of view, it is argued that it is of critical importance to create awareness and knowledge for organizations and firms to be aware of the negative impacts of their operations and be committed to minimizing them (Despeisse et al., 2012; López-Torres et al., 2019). Therefore, to enhance sustainability in firms’ daily operations, sustainability learning is needed to bring awareness to management about their new roles along with new infrastructure and sustainability indicators (Carayannis et al., 2015; Longoni & Cagliano, 2015). Having sustainable operations and management has positive

contributions to a firm's competitiveness. Additionally, sustainable operations lead to increasing firm performance. This positive impact of sustainable operations and management implies that sustainability learning is critical in these two fields. This is due to the fact that sustainability is the basis of firm competitiveness; therefore, learning about sustainability is the fundamental core competence (Haugh & Talwar, 2010; López-Torres et al., 2019; Wijethilake & Upadhaya, 2020). Furthermore, sustainability learning plays a significant role in seizing opportunities for creating a market for green technologies and developing sustainable, decent and green jobs in the labour market. Having sustainability skills alone cannot create jobs; this is mainly achieved when sustainability skills and knowledge is combined with other employment and macroeconomics policies to contribute to job creation in new and potentially greener economic activities such as renewable energies (Strietska-Ilina, 2014).

Sustainability learning creates experts well-equipped with skills and competency for the three pillars of sustainability. In a developing world context, sustainability experts are highly needed, given that these countries highly depend on expertise from the developed world (Strietska-Ilina, 2014). For implementing issues like a green economy, it is paramount to develop the skills and competence in the region that needs to improve sustainability practices, despite the positive impact of sustainability learning as a source of skill development and competency still needing to be researched. Specifically, studies assessing the willingness to accept sustainability learning in operations and management are still scant (López-Torres et al., 2019; Wijethilake & Upadhaya, 2020). To address this research gap, the researchers sought to assess the willingness of practitioners to accept sustainability learning at the operations and management levels in various organizations. The study further compared different functional units to evaluate the units more willing to accept sustainability learning in a developing world context.

Empirical literature

Prior studies focusing on sustainability learning have examined market drivers of sustainability and sustainability learning capabilities. They examined sustainability learning capabilities and whether the market drivers of sustainability in an emerging economy influence organizations' sustainability learning capabilities. They highlighted that managers face several complexities within an emerging economy context to enable existing knowledge and facilitate new sustainability learning. (Wijethilake & Upadhaya, 2020). Other studies within sustainability learning areas focused on examining internal and external factors influencing the implementation of sustainability learning, environment management systems, and learning orientation (Feng et al., 2014; Schrette et al., 2014). In their study, Feng et al. (2014) pointed out that knowledge sharing and commitment to learning have a positive impact on firm performance. Furthermore, scholars argue that in to overcome sustainability challenges, the issue of sustainability learning is inevitable at all levels, from individual, group, organization as well as the societal level (Hansmann, 2010). Also, it is further suggested that one way of promoting sustainability at these levels is through education (Chen et al., 2022; Hansmann, 2010). A study by Mayo et al. (2022) highlighted sustainability learning as a potential remedy for the sustainability agenda. The article highlights educational levels through training intervention as critical, among other issues. These arguments emphasized much on the importance of sustainability learning as an engine for promoting sustainability agenda. This study further explores the willingness to accept sustainability learning in management and operations.

Additionally, various empirical type of research that provides an understanding of sustainability learning from industry perspectives is also evident. Looking at how the COVID-19 pandemic impacts the supply chain, for example, Pereira et al.(2020) investigated how learning sustainable initiatives in the supply chain are undertaken, and multiple levers of learning at individual, organizational, and supply chain are found. The study provided an overall understanding of how suppliers in emerging economies of global supply chains are coping with the changes and the importance of supplier learning in global supply chain sustainability. Demonstrating organizational learning in the aviation sector, Pourdehnad and Smith (2012) used the general organizational learning and adaptive system under the triple-bottom-line principles of sustainability. The study proposes for the learning to be adopted by organizations that intend to embrace sustainability. Nevertheless, empirical researches related to the willingness to accept sustainability aspects by practitioners or beneficiaries are also evident, despite missing the actual investigation on willingness to accept sustainability learning. One of these aspects is on willingness to pay for sustainability-related aspects. The research explained individuals' willingness to pay for sustainability related aspects, such as the value of sustainability (Kaur, 2022; Bamwesigye et al., 2020; Grankvist, 2019). Some scholars researched the willingness to invest in sustainability (Lingnau et al., 2022). Others research on willingness to participate in and adopt the use of sustainable products and services (Majbar et al., 2021; Okumah et al., 2020; Sattari, 2020). Moreover, others extend the research to practitioners' willingness to forego some profits to foster sustainability benefits (Zheng et al., 2021). Despite these researchers being on the implementation of sustainability aspects, tracing the initial learning implementation is essential. Within this research framework of willingness on sustainability aspects, there needs to be more research that explicitly addresses practitioners' willingness to accept learning on sustainability in its entirety.

The above-reviewed literature motivated this study to indulge in assessing the willingness to accept sustainability learning from the industry and understanding the stakeholder's views of the industry. Building on the gaps that training institutions need in the inclusion of sustainability learning, there is a need for understanding the state of the market as far as sustainability is concerned. More of the reviewed studies have focused on the inclusion of sustainability in curricula in training institutions. To contribute to the identified gap, the researchers assessed the willingness to accept sustainability learning in industry-specific functional areas. Reviewed literature concentrated more on a case studies-based approach rather than comparative-based approach. Additionally, the comparative research concentrated on assessing measurable outputs for environmental externalities within institutional operations, with little examination of willingness to accept sustainability learning and outcomes across institutional functional areas.

Methodology

This research adopted a cross-sectional design whereby quantitative data gathered from the study was used to justify the study's objective. The study focused on assessing the willingness to accept sustainability learning in management and operations in different functional areas within organizations in Tanzania. More specifically, the study assessed the readiness to accepting sustainability learning by different functional areas in organizations. It also assessed the acceptance of skills and competencies that are to be generated as a result of accepting sustainability learning. Furthermore, it assessed the employability potentials of graduates in the

area of sustainability management and operations. The study involved developing and reviewing a survey tool by a team of research experts. The survey tool was pretested, and all inputs were incorporated into the final questionnaire. Opinions of potential respondents were obtained through direct contact with the intended respondents and also by using online surveys. A total of 250 questionnaires were distributed physically and through online means. Physical data collection was done in Mbeya and Morogoro regions, whereby a total of 100 questionnaires were physically distributed to respondents in various organizations, and 150 questionnaires were distributed online. Out of the 100 physically administered questionnaires, 54 were returned. On the other hand, 98 of the 150 online distributed questionnaires were returned. In total, the entire data-gathering process resulted in the collection of 152 questionnaires making a 61% response rate.

After data collection exercises, the gathered data were cleaned and out of which two questionnaires were eliminated. Therefore, the final data set was comprised of 150 questionnaires. The collected data were analyzed descriptively using Microsoft Excel and IBM SPSS. Analysis of variance (ANOVA) method was employed in comparing the mean on the acceptance of sustainability areas to be learned, acceptance of the skills and competencies acquired from sustainability learning, and acceptance of the employability potentials of the sustainability trainees. All these were compared between the five different functional areas identified in management and operations, namely management, operations, accounting and finance, logistics, procurement and supplies, and other functional areas.

Analysis and interpretation of findings

Respondent's profile

The demographic characteristics of the respondents mainly captured the respondents' sex, education level, and the departments to which respondents belong. In inquiries to capture the sex characteristics of respondents, the two variables of male and female were inquired from each respondent. The findings in Table 1 indicate that 74.7% of respondents were male, whereas 25.3% were female. This is an indication that the study had a higher representation of male compared to female respondents. Concerning the respondents' level of education, the study used an open question for the respondents to fill in their levels of education. Findings indicate that 3.3% of respondents belong to the Diploma level of education, and 32% have Bachelor's Degrees. Moreover, 56% of the respondents are holders of Master's Degrees, and 8.7% are Ph.D. holders. With these findings, the study indicates that the majority (55%) of respondents are holders of Master's Degrees. Another component of respondent characteristics that the study inquired about capturing is the distribution of departments to which respondents belong. Findings indicate that 8.7% of respondents belong to the logistics, procurement and supplies department, 16.0% of respondents belong to the accounting and finance department, 21.3% of the respondents belong to the operations department, 34.0% of respondents belong to the management department, and 20% belongs to other departments. These findings indicate that most respondents belong to the management, operations, accounting and finance, and procurement and supplies department among, many other departments. However, most of the four leading departments in representations belong to the management department.

Table 1: Respondents' Profile

| Respondents Profile | Frequency | Percent | Cumulative Percent |
|---------------------------------------|-----------|---------|--------------------|
| Sex | | | |
| Male | 112 | 74.7 | 74.7 |
| Female | 38 | 25.3 | 100.0 |
| Education Level | | | |
| Diploma | 5 | 3.3 | 3.3 |
| Bachelor's Degree | 48 | 32.0 | 35.3 |
| Master's Degree | 84 | 56.0 | 91.3 |
| Doctorate (PhD) | 13 | 8.7 | 100.0 |
| Departments respondents belong | | | |
| Management | 51 | 34.0 | 34.0 |
| Operations | 32 | 21.3 | 55.3 |
| Accounting and Finance | 24 | 16.0 | 71.3 |
| Other departments | 30 | 20.0 | 91.3 |
| Logistics, Procurement and Supplies | 13 | 8.7 | 100.0 |

Readiness of accepting sustainability learning in different functional areas

The study examined the respondents' acceptance of the themes that are proposed to be studied under sustainability learning. The analysis and findings on these themes are presented in Table 2. Findings in Table 2 indicate all proposed sustainability learning areas have a mean value above 4, a rating value that stands for the "needed" rate. With this indication of the mean value, it implies that the respondents need proposed sustainability learning areas. Hence, the analysis concludes acceptance of all proposed sustainability learning areas as respondents see it is needed. The study also wanted to compare whether there was a significant difference in acceptance of proposed sustainability learning areas across five functional areas: management, operations accounting and finance, logistics procurement and supplies, and other functional areas. For all proposed nine sustainability learning areas, as indicated in Table 2, there were no any significant differences in responses across all functional groups area at a 5% significance level.

Acceptance of the expected skills and competencies from sustainability learning

The study also assessed the respondents' expectations of the acquisition of skills and competencies from sustainability learning. Results from the analysis of data captured for this assessment are indicated in Table 3. All potential skills and competencies that are expected to be gained from the proposed sustainability learning areas have a mean value of above four, as indicated in Table 3 above, a value that stands for "likely". These findings indicate that respondents are likely to benefit from the skills and competencies that will be generated from the proposed sustainability learning areas. The study also wanted to compare whether there is a significant difference in acceptance of the expected skills and competence across five functional areas: management, operations accounting and finance, logistics procurement and supplies, and other functional areas. For all expected skills and competence, as indicated in Table 3, there were no significant differences in responses across all functional groups area at a 5% level of significance.

Table 2: Means, Standard Deviations, and One-Way Analyses of Variance in nine proposed sustainability learning areas

| | Management | | Operations | | Accounting and Finance | | Others | | Logistics, Procurement and Supplies | | Mean Square | F (4150) | p-value |
|---|------------|-------|------------|-------|------------------------|------|--------|------|-------------------------------------|-------|-------------|----------|---------|
| | M | SD | M | SD | M | SD | M | SD | M | SD | | | |
| Fundamentals of Sustainability | 4.51 | .731 | 4.22 | 1.184 | 4.67 | .565 | 4.23 | .858 | 4.46 | .519 | 1.057 | 1.501 | .205 |
| Strategy and Leadership | 4.59 | .726 | 4.56 | .759 | 4.67 | .482 | 4.57 | .568 | 4.77 | .439 | .139 | .330 | .857 |
| Sustainable Supply Chain | 4.27 | 1.078 | 4.25 | .984 | 4.38 | .770 | 4.23 | .774 | 4.77 | .439 | .796 | .950 | .437 |
| Sustainable Logistics and Operations | 4.51 | .903 | 4.13 | 1.157 | 4.46 | .779 | 4.23 | .626 | 4.69 | .480 | 1.250 | 1.643 | .167 |
| Technology and Innovation | 4.67 | .792 | 4.50 | .880 | 4.88 | .338 | 4.63 | .718 | 4.69 | .480 | .491 | .941 | .442 |
| Communicating Sustainability | 4.12 | 1.013 | 4.16 | 1.051 | 4.54 | .588 | 4.00 | .871 | 4.31 | .480 | 1.133 | 1.390 | .240 |
| Global Sustainability Trends and Impact | 4.27 | .896 | 4.00 | 1.078 | 4.46 | .658 | 3.90 | .960 | 4.23 | .725 | 1.428 | 1.738 | .145 |
| Sustainable HRM Systems | 4.10 | 1.100 | 4.38 | .871 | 4.42 | .881 | 4.24 | .830 | 4.15 | 1.144 | .614 | .646 | .630 |
| Sustainability Impact Assessment and Evaluation | 4.24 | .885 | 4.06 | .982 | 4.33 | .816 | 4.07 | .640 | 4.23 | .725 | .395 | .559 | .693 |

Note: Significant if p-value < .005.

Table 3: Means, Standard Deviations, and One-Way Analyses of Variance in the expected skills and competence

| | Management | | Operations | | Accounting and Finance | | Others | | Logistics, Procurement and Supplies | | Mean Square | F (4150) | p-value |
|--|------------|-------|------------|-------|------------------------|-------|--------|-------|-------------------------------------|-------|-------------|----------|---------|
| | M | SD | M | SD | M | SD | M | SD | M | SD | | | |
| Overall understanding of sustainability aspects | 4.20 | .800 | 4.19 | .931 | 4.17 | .816 | 4.03 | .809 | 4.23 | .725 | .160 | .232 | .920 |
| Strategic direction and effective leadership in transforming firms to become sustainable | 4.43 | .806 | 4.50 | .672 | 4.46 | .721 | 4.33 | .994 | 4.15 | .555 | .342 | .545 | .703 |
| Design and implement sustainable supply chains | 4.08 | .977 | 4.22 | .975 | 4.33 | .868 | 4.13 | .937 | 4.46 | .660 | .552 | .639 | .635 |
| Models, tools, and the best practices of sustainable logistics and operations | 4.29 | 1.026 | 4.28 | .888 | 4.21 | .977 | 4.07 | 1.015 | 4.54 | .660 | .565 | .611 | .655 |
| Sustainable production technologies | 4.20 | 1.077 | 4.28 | 1.023 | 4.42 | .717 | 3.80 | 1.270 | 4.46 | .519 | 1.755 | 1.670 | .160 |
| Communicating sustainability | 4.20 | .980 | 4.31 | .859 | 4.46 | .779 | 3.97 | .850 | 4.38 | .506 | .979 | 1.304 | .271 |
| Global sustainability standards, ethics, and political governance aspects | 4.14 | 1.020 | 4.31 | .859 | 4.21 | .833 | 3.90 | 1.062 | 4.38 | .506 | .878 | 1.005 | .407 |
| Sustainable human resource systems | 4.22 | 1.045 | 4.31 | .931 | 4.13 | 1.116 | 4.47 | .507 | 4.08 | 1.038 | .586 | .651 | .627 |

Note: Significant if p-value < .005

Employability potential of sustainability learning scholars

The study also examined the employability potential of the graduates in sustainability learning programmes. Findings on this objective are presented in Table 4. As it is shown in Table 4, respondents observed that the graduate of these proposed learning are likely to be employed in different organizations as the mean response is 3.14, which stands for employable. The findings imply that employers perceive individuals' possessions of the skills and competencies from the proposed sustainability learning areas to be employable in organizations.

Table 4: Means, Standard Deviations, and One-Way Analyses of Variance in the likelihood of employability in organizations

| | Management | | Operations | | Accounting and Finance | | Others | | Logistics, Procurement & Supplies | |
|--------------------------|------------|------|------------|------|------------------------|------|--------|------|-----------------------------------|------|
| | M | SD | M | SD | M | SD | M | SD | M | SD |
| Employability likelihood | 3.14 | .651 | 3.50 | .516 | 2.80 | .941 | 3.08 | .996 | 2.71 | .488 |

Note: Significant if $p\text{-value} < .005$.

Table 4 Continued

| | Mean Square | F (4,150) | p-value |
|--------------------------|-------------|--------------|---------|
| Employability likelihood | 1.251 | 2.274 | .069 |

Note: Significant if $p\text{-value} < .005$.

The study also wanted to compare whether there is a significant difference in suggestions for employability potential for scholars in the area of sustainability management and operations across five functional areas, namely management, operations accounting and finance, logistics procurement and supplies, and other functional areas. As indicated in Table 4, there was no significant difference in responses across all functional groups area at a 5% level of significance.

Discussions of findings

This study adds knowledge to the existing literature by reporting findings on the willingness to accept sustainability learning in management and operations based on data obtained from a developing country. Existing studies highlighted that there is a need to understand the market and the need for the issues related to sustainability learning (Sewchurran et al., 2022; Wijethilake & Upadhaya, 2020). This study responded to this call by reporting that there is a high need for the proposed learning areas, such as fundamentals of sustainability, strategy and leadership, sustainable supply chain, logistics and operations, technology and innovation, communicating sustainability, global sustainability trends and impacts, sustainability human resources systems, sustainability impact assessment, and evaluation. This study is in line with other studies which emphasize the importance of sustainability learning and the readiness of the industry to undertake sustainability studies (Collins et al., 2007; Siebenhüner & Arnold, 2007). Furthermore, findings indicate that respondents were most likely to benefit from the skills and competencies that will be generated from these learning areas. On top of that the study wanted to seek the employability potential for graduates of sustainability related training. The findings of this study indicated high employment for people with sustainability-related skills and competencies.

Although studies indicate a significant number of research on issues related to sustainability, little is known on comparative studies with the existing concentration on assessing measurable outputs for environmental externalities within institutional operations, with little examination of the willingness to accept sustainability learning and outcomes across different operations within an organization (Vaughter et al., 2013). This study compared the results for all three objectives for respondents from five functional areas: management, operations accounting and finance, logistics procurement and supplies, and other functional areas. In all three objectives, there are no significant differences in responses across the function areas indicating that sustainability learning is needed across all functional areas within organizations.

Conclusion and implications

The main objective of this study was to assess the willingness to accept sustainability learning in management and operations in different organization in Tanzania, more specifically, assessing the acceptance of the proposed sustainability learning areas, acceptance of the expected skills and competence generated from sustainability learning areas and assessing the employability potential for scholars in the area of sustainability management and operations. Results clearly show a great need for sustainability knowledge and skills in different sectors. The leading unit is the management level; this indicates that most organizations need their employee to be well-equipped with sustainability knowledge and skills. The results of this study provide a good alert to policymakers and the government at large to induce sustainability learning in different levels of learning institutions such as universities and secondary schools. This will lead to sustainable development in different sectors since the employees will be aware of sustainability skills and knowledge. Therefore, this study understands the relevance of sustainability learning in management and operations. It recommends that organizations and businesses undertake specific training to develop sustainability expertise in management and operations, as sustainability learning in these fields is highly taken.

Similar to other studies, this study also faces several limitations. First the data collected were very few; this was due to limited time and financial resources; the study made a comparison based on different functional areas within organizations. Additionally, the study also was limited to the findings obtained from the industry. Therefore, we recommend further studies to compare organizations' opinions on the willingness to accept sustainability learning. The studies also recommend further study to consider opinions from learning institutions rather than focusing only on the opinions from the industry.

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