

Article

Achieving Organizational Social Sustainability through Electronic Performance Appraisal Systems: The Moderating Influence of Transformational Leadership

Zia Ullah ^{1,*}, Susana Álvarez-Otero ², Mohammed Ali Bait Ali Sulaiman ³, Muhammad Safdar Sial ⁴, Naveed Ahmad ⁵, Miklas Scholz ^{6,7,8,*} and Khaoula Omhand ⁹

- ¹ Leads Business School, Lahore Leads University, Lahore 54000, Pakistan
 - ² Department of Business Administration, Faculty of Economics and Business, University of Oviedo, 33003 Oviedo, Spain; saotero@uniovi.es
 - ³ Department of Marketing and Entrepreneurship, Dhofar University, Salalah 211, Oman; msulaiman@du.edu.om
 - ⁴ Department of Management Sciences, COMSATS University Islamabad (CUI), Islamabad 44000, Pakistan; safdarsial@comsats.edu.pk
 - ⁵ Faculty of Management Studies, University of Central Punjab, Lahore 54000, Pakistan; naveeddgk2010@gmail.com
 - ⁶ Division of Water Resources Engineering, Department of Building and Environmental Technology, Faculty of Engineering, Lund University, P.O. Box 118, 221 00 Lund, Sweden
 - ⁷ Department of Civil Engineering Science, School of Civil Engineering and the Built Environment, University of Johannesburg, Kingsway Campus, Auckland Park 2006, Johannesburg P.O. Box 524, South Africa
 - ⁸ Department of Town Planning, Engineering Networks and Systems, South Ural State University (National Research University), 76, Lenin Prospekt, 454080 Chelyabinsk, Russia
 - ⁹ Business School, University of Wolverhampton, Wolverhampton WV1 1RN, UK; K.omhand@wlv.ac.uk
- * Correspondence: chairperson.ba@leads.edu.pk (Z.U.); miklas.scholz@tvr.lth.se (M.S.)



Citation: Ullah, Z.; Álvarez-Otero, S.; Sulaiman, M.A.B.A.; Sial, M.S.; Ahmad, N.; Scholz, M.; Omhand, K. Achieving Organizational Social Sustainability through Electronic Performance Appraisal Systems: The Moderating Influence of Transformational Leadership. *Sustainability* **2021**, *13*, 5611. <https://doi.org/10.3390/su13105611>

Academic Editors: Teresa Proença, Gina Gaio Santos and Filomena Jordão

Received: 23 April 2021
Accepted: 12 May 2021
Published: 18 May 2021

Publisher's Note: MDPI stays neutral with regard to jurisdictional claims in published maps and institutional affiliations.



Copyright: © 2021 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

Abstract: Organizational sustainability is the reality which is considered essential for the success of all kind of organizations. Researchers and academicians struggle to conceptualize this phenomenon while practitioners endeavor to achieve it on the ground. Much has been done in resource-affluent countries of the world, whereas in the least developed countries, social sustainability is now becoming a new normal. The purpose of this research was to understand the social perspective of organizational sustainability and the roles of electronic performance appraisal and transformational leadership in shaping it. Data were collected from the healthcare sector through the administration of close-ended questionnaires to a randomly selected sample; 320 out of 400 questionnaires with an acceptable degree of accuracy were selected for statistical treatment. Inferential statistics were applied using structural equation modeling (SEM). Results confirmed the existence of definite contributions of the electronic performance appraisal system and transformational leadership towards organizational sustainability. However, our findings surprisingly ruled out the moderating role of transformational leadership on the cause and effect relationship between electronic performance appraisal and organizational social sustainability. In the face of a scarcity of related literature in the given context and due to the partial novelty of the model, the findings of this study add significantly to the existing bank of literature in the field. It will also be handy for the guidance of practitioners who are engaged in sustainability management.

Keywords: electronic performance appraisal; organizational social sustainability; transformational leadership

1. Introduction

The phenomenon of sustainability came into play when a decline was noticed in the natural environment, alongside the adverse impacts on public health, national economies,

and societal harmony. Recently, it has been associated with a wider set of concerns, a complex outcome with economic, environmental, and social elements [1]. Sustainability has been a popular subject over the last decade and brought organizations under tremendous pressure to make their strategies aligned with organizational sustainability [2]. The concept of organizational success has expanded beyond outputs, production, profitability, or satisfaction of few stakeholders. Organizational success is usually anchored around its sustainability, which encompasses the economic, environmental, and social aspects of the organization. The environmental deterioration and the consequences arising thereof led to the emergence of sustainability in order to revert the environment to normalcy. The idea of sustainability gradually penetrated to organizational systems, and a balance among social, economic, and environmental matters was emphasized to build organizational success. Sustainable organizations have the competence to satisfy the needs of the present stakeholders, predict future happenings, and create strategies to manage future events in some purposive manners.

The construct of organizational sustainability has been linked to the Triple Bottom Line (TBL) that segments organizational sustainability into economic, environmental, and social pillars [3]. The social sustainability of an organization is related to the cordiality of the relationship of organizations and their stakeholders, particularly the employees. In the present era, technological advancements have made access to resources equally possible for most organizations [4]. The resource which is not easily accessible in the market is a knowledgeable, skilled, and motivated employee. This is the reason modern organizations seek sustainable competitive advances through sustainable human resources. Thus, social sustainability is realized through human development, including education, training, a conducive work environment, reasonable compensation, and strong corporate culture.

The penetration of the Internet and information technology has made the Internet the most volatile place where organizations operate. This environmental change has, in return, compelled organizations to redesign their entire internal configurations. The transformation of traditional HR practices into computer-based (e-HR) is one of the examples. This change has produced diverse kinds of responses from employees. Job dissatisfaction and resistance to change occurred as the result of computer illiteracy, fear of loss of job, and preference of known over unknown. However, it has been indispensable for organizations to adopt digital technologies to deal with the multitudes of challenges and as a vital element for survival in a turbulent and competitive environment. Thus, the digitalization of HR practices has improved organizational performance at large and young strata of employees can well manage it. The electronic performance appraisal (e-PA) is one of the digitalized HR practices that has had a profound and diverse effect on employees as well as organizational performance [5]. The correct portrayal of performance, constructive feedback, fairness in the appraisal, and performance-based organizational treatment usually enhance an employee's attitude towards his organization [6].

On the other hand, transformational leadership has key roles in organizational survival and effectiveness. Such leaders concentrate on employees rather than tasks or targets and provide a conducive and friendly environment to them [7]. Literature indicates the positive influences of transformational leadership on individual, group, and organizational level outcomes, including employee job satisfaction, organizational citizenship behaviors, cooperation, commitment, performance information use, perceived work quality, and mission valence [8–13].

We believe that committed, motivated, and loyal employees erect the social sustainability of an organization. The premise that we have constructed for this study is that fair and true performance appraisals will positively affect employees, ultimately creating a sense of affiliation with the organization. Transformational leadership, on the other hand, may play a positive role in the formation of social sustainability. We further believe in the researches which indicate that technological interventions and the digitalization of performance appraisal systems enhance the accuracy of performance appraisal. Thus, electronic

performance appraisals (e-PA) could contribute to the formation of social sustainability in an organization.

2. Literature Review

Sustainability has become a prominent theme in academia, the corporate world, political platforms, and research settings [14–17]. Debates and discussions on what it is, why is it important, and how to achieve it are pervasive [18]. Evaluations of organizations have moved beyond efficiency and effectiveness which are directed towards profitability, and in the present era, better organizations are sustainable organizations. Sustainability is the integration of economic, social, and environmental elements into the organization [19,20]. A sustainable organization is not that necessarily successful in maintaining itself, for example, profitability, but rather to effectively balancing people, prosperity, and the planet by ensuring a dynamic equilibrium between these three Ps [21]. Organizational sustainability represents an ongoing process rather than a state of perfection. It is like a tree: it grows and prospers when watered and cared for, but fades rapidly if it is not [22].

The literature on sustainability typically approaches sustainability as either a meso-level organizational concept or a macro-level societal concept. Although precise definitions of sustainability are not agreed upon, most scholars identify three interrelated dimensions of sustainability, i.e., environmental, economic, and social [23–28]. However, it is dominated by the two dimensions, including environmental and economic concerns [25,29,30], the least concern being given to the social aspect. The norm of reciprocity builds social sustainability by increasing trust and cooperation in any group of people and explains this complex relationship. Macro-level sustainability scholars are now paying increasing attention to the social dimension of sustainability [29–31]. Human and social sustainability in organizations is the ability of employees individually and collectively to work under any situation faced. Hence, a significant aspect of the practical capacity and sustainability of an organization is the integration among its workforce [32]. Any organization cannot grow complex and sustainable if its workforce develops individuality without any integration [33]. Likewise, any attempt at integration within an organization without any development in the individual employee does not ensure sustainability but instead creates an odd way of collaboration between people who have nothing new to share [34]. Firstly, for organizational sustainability, its members should grow complex in their ideas and actions and make their efforts significant and worth the struggle. Secondly, these employees should be able to learn together and become well integrated into groups, departments, and an organization with shared, complex mental models and action patterns [35]. To develop such social sustainability there should be a network of interacting individual employees and groups whose development goes together [36].

Performance management has direct bearings on organizational sustainability [5]. It includes strategic plans and actions aimed at meeting the needs of the organizations and their stakeholders, while sustaining, accumulating, and preserving the financial and human resources they may be needed in the future [6,37]. Digitalization and the use of technology are the ways forward towards environmental and organizational sustainability. One of the major challenges for contemporary managers is developing sustainability practices that outline strategic decision making and ensure the strengthening of desired behaviors [38,39]. Moreover, the adoption of technology, particularly IT, and the digitalization of practices, promise overall organizational success [40]. The use of computers and IT in human resource practices guarantees unbiasedness, authenticity, timeliness, and justice, thereby developing social sustainability organizations [5]. The application of electronic human resources management (e-HRM) to performance management has empowered organizations to give performance feedback on a regular and frequent basis, to enhance employees' positive participation and sense of accountability, to engage peers in the performance feedback process, and to augment the social outcomes of performance appraisal and feedback [41,42]. Determining the goals is often incorporated into an e-HRM system with a clear connection between individual and organizational goals [43]. For the effectiveness of performance

management, it should be aligned with the human resource management system of the organization [44,45]. Certainly, for the last four decades, organizations have been gradually adopting e-HRM practices (including e-performance management and e-compensation systems) for gaining strategic and managerial improvements, such as reducing cost and enhancing the quality of services [46]. Song et al. [47] suggested that an accurate and authentic performance appraisal needs to be relevant, all-encompassing, and free of all kinds of contamination.

Burns (1978) published his seminal work 43 years ago presenting the concepts of both transactional and transformational leadership [48]. Prior researches have confirmed the positive effects of transformational leadership on performance outcomes of employees, including creativity, innovative attitudes, job performance, and organizational citizenship behaviors [49,50]. Employees believe that the transformational leadership qualities of their supervisor in regard to improving employees' cognitive process and emotional stability would positively affect organizational identification and continuous improvement efforts of the employees [51]. Transformational leadership, among other leadership behaviors, is usually associated with administrative efficiency throughout organizational change [52,53]. Transformational leaders emphasize the importance of change, develop and share their persuasive vision with other stakeholders, including employees, lead them towards adaptations, and inspire them to achieve the exciting goal of organizational change [52]. The phenomenon of "transforming leadership" was first presented by Burns [48], yet it was taken forward by Bass [54], who recognized that in a changing environment, transformational leadership is effective at widening and uplifting the interests and well-being of workers, creating awareness and recognition of the vision and goals of the organization, and stimulating the workers to think beyond their own self-interests for the betterment of the entire organization [55].

Transformational leadership is the charisma and the capability of transforming the employees' values and characteristics, enhancing their willingness to pursue the organization's overall goals [56]. These leaders produce a harmonious and conducive environment to establish a trustworthy relationship, wherein a collective vision is shared in this enabling climate of trust [57]. Gillespie and Mann [58], while conducting a study on R&D teams, found that transformational leadership practices correlated with the trust of team members in their leaders.

Digitalization of organizational activities is being realized as indispensable to remain in the competitive market place, and this kind of change is being honored with varying levels of adoption. Technological and IT-based interventions in managing human resources are frequent in developed countries, and in developing countries they are in their embryonic stages [5,59]. Research on overall e-HRM is extensive, but the literature on investigating electronic or IT-based HR practices, e.g., e-recruitment, e-training, and e-performance appraisals, is relatively scant [60]. Managers are realizing the importance of social sustainability within organizations and researchers are yet to pay attention to this phenomenon in developing countries [61], and the given context is one such country. Transformational leadership has been extensively investigated by researchers but its role concerning social sustainability has not been documented [62]. Hence, the present literature is silent regarding the relationship between e-PA and organizational social sustainability and the moderating role of transformational leadership. Thus, this study is a seminal work and the model presents a perfect novelty.

We attempted to study the social aspect of organizational sustainability which is reflected by their human capital. The collective competence of employees and the intensity of their association with the organization determine social sustainability. HR practice could directly influence the construction of sustainability. Any change in HR practice, including digitalization, is expected to affect social sustainability. Apart from that, leadership styles will play a role in shaping social sustainability. Relationships and decision making affects employees, and leaders design relationships and do decision making. Thus, the study

was conducted with the premise that e-PA positively affects social sustainability within organizations and that this relationship is moderated by transformational leadership.

3. Theoretical Framework and Hypotheses

The social sustainability of an organization refers to employees' integration and relatively long-term affiliation with the organization. This kind of relationship is the outcome of certain organizational traits that employees at large perceive to be positive or favorable to them. The norm of reciprocity [63] requires that people repay in kind what others do for them. The norm of reciprocity builds social sustainability by increasing trust and cooperation in any group of people and explains this complex relationship. In addition to the empirical evidence supporting the norm of reciprocity, there are good theoretical reasons why our behavior should be regulated by such a norm [64]. Equity theory also provides a theoretical basis for this kind of study. It explains that employees look for justice and the prevalence of justice in an organization deeply influences the behavior of employees. The overall perception of employees elucidates a positive evaluation towards procedural, interpersonal, and distributive justice in performance appraisal. Organizational life plays a vital role in developing exchange relationships between the leader and followers; therefore, social exchange theory (SET) [65,66] can be used as a theoretical lens to understand the impacts of transformational leadership and organizational justice on employees' identification with their organization and social sustainability.

3.1. Definitions of Variables

Organizational social sustainability (SOS): Organizational social sustainability works as a criterion variable. Social sustainability is one of the three dimensions of sustainability [67]. The overall influence of employees on sustainability and their role in forming it is simply referred to as social sustainability [67,68]. It is a reciprocal function as and when an organization provides a conducive work environment by meeting the expectations of employees and employees in return meet organizational expectations on a long-term basis [69]. Thus the term social organizational sustainability is defined as the cordiality of the relationship between an organization and its employees on a relatively long-term basis.

Electronic performance appraisal (e-PA): Performance appraisal is the process through which the overall work of an employee is portrayed and his/her contribution to the organization is reviewed [70]. It is the big picture feedback provided to each employee on their work and many strategic decisions are made accordingly. Electronic performance appraisal refers to the digitalization and computerization of the performance appraisal process [71]. Thus, e-PA is the use of IT and computers to measure employee performance [5].

Transformational leadership (TL): Transformational leadership is a theory of leadership which states that this particular type of leader inspires, motivates, encourages, and enables employees to bring positive change [48]. Transformational leaders uplift the morals, motivation, inspiration, and morale of the employees [72]. They emphasize what you can contribute to your organization. Such leaders possess the likeliness of a role model and followers obey unconditionally [73]. In short, transformational leadership is a system where the leader and the employees go beyond self-interest for the betterment of the organization and employees become transformed into motivated, inspired, and committed ones and work with a complete sense of ownership.

3.2. Hypotheses

Performance appraisal is a key HR practice that is a competency-based management mechanism for the evaluation of employee performance in relation to goal achievement and the explanation of the competencies needed to perform the task [74]. Performance appraisal is the multi-purpose HR practice aimed at measuring the achievement of goals, guiding training programs, structuring and restructuring compensation and benefits packages, job analysis and design, promotions and job rotations, and HR planning [6]. Performance appraisal also has profound influences on employee job satisfaction, turnover intentions,

and self-assessment [75]. It promotes accountability, transparency and fairness, and justice across the organization. The introduction of IT and computers to the PA aims at making it more accurate, objective, timely, unbiased, and fair [5]. These objectives have been achieved to the great extent with the intervention of technology in PA [5,43]. Researchers have extensively investigated the impact of PA on various organizational dimensions as well as on employees' attitudes and behavior, but to the best of our knowledge, PA have not been studied in relation to organizational social sustainability. Since the e-PA is the more effective version of the PA and has direct bearing on employees, we assume that PA has a role in the formation of organizational social sustainability. The connection of the variables has been shown schematically in Figure 1. Thus we formulated this hypothesis

Hypothesis 1. *An electronic performance appraisal system will have a positive impact on organizational social sustainability.*

Transformational leaders pay considerable attention to their employees while distinguishing them as per individual performance level, which motivates them and creates loyalty toward conquering their specified objectives in the organization; consequently, they do not intend to switch organizations [58]. Transformational leadership, unlike other leadership styles, is employee-oriented rather than task-oriented. Studies confirm the significant impacts of transformational leadership on organizational performance, employee creativity, employee retention, service quality, burnout and other negative psychological states, job performance, organizational citizenship behavior, motivation and other positive psychological states, and project success [52,57,60]. We believe, and some studies found, that some employees fear technology and thus may not be comfortable with e-PA. Employees may have certain reservations regarding e-PA that eventually cause negative attitudes or behavior. We assume that transformational leadership can play an effective role in convincing employees regarding the uses and benefits of e-PA. Based on all these facts we developed the following hypothesis:

Hypothesis 2. *Transformational leadership improves the relationship between electronic performance appraisal and organizational social sustainability.*

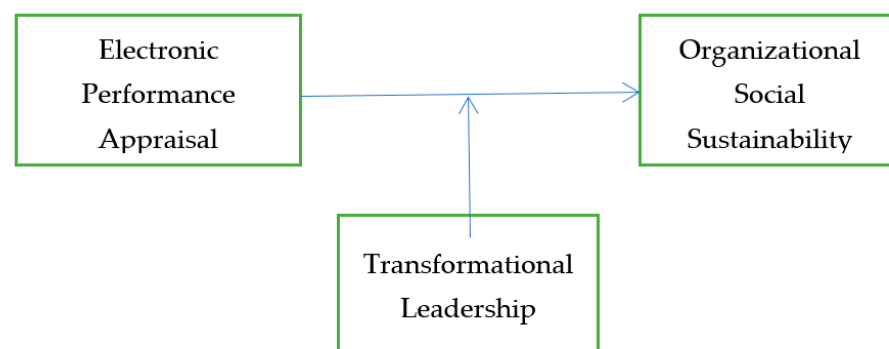


Figure 1. Conceptual framework.

4. Methodology

This research work, by nature, is explanatory, quantitative, and cross-sectional. The survey method has been used for data collection. Data were gathered from four tertiary hospitals situated in Lahore city of Pakistan. We chose these hospitals because they provided us the lists of their employees to randomly select a sample for the study. These hospitals used electronic performance assessments for more than five years. Employees of each hospital were well aware of the e-PA systems prevailing in their respective hospitals.

The administrator of each hospital was contacted to obtain permission for data collection and a written declaration was submitted to ethical bodies of each hospital to observe ethical standards while collecting data. Additionally, informed consent was obtained

from each respondent for participation in the survey willingly and voluntarily. Hospital administrators were kind enough to instruct their HR departments to administer questionnaires to their selected employees on behalf of researchers. In this way, we did not need to stay in hospitals for long hours and contact employees in person, so the observance of SOPs for protection against the COVID-19 pandemic was upheld. For this purpose, each hospital nominated 5 persons from their respective HR departments to collect data. We provided the necessary training to these persons on how to administer and fill out the questionnaires. Data collection was conducted in line with ethical guidelines provided Helsinki Declaration [76]. Approval was obtained from the ethical committee of Lahore Leads University Pakistan.

4.1. Sample and Respondents' Demographics

The population of the study consisted of staff in tertiary hospitals working in the metropolitan city of Lahore Pakistan. Since HR structures in all the tertiary hospitals are similar, little variation in the respondents was expected. The inclusion of four hospitals was to increase the sample size. We provided 100 close-ended questionnaires to each hospital to administer to the randomly selected sample. Out of the total of 400 questionnaires, 351 were collected back; 320 questionnaires with an acceptable degree of accuracy were selected for analysis. It took two months to collect data, which started in the first week of January and ended in the first week of March 2021. The sample was drawn using a simple random sampling technique by selecting 100 subjects from each hospital on a random basis. This sampling method was used to achieve the representativeness of the sample. Data collection was carried out through the HR department of each hospital. In summary: 46.82% of respondents were male and 53.2% were female. According to occupation, 112 respondents were physicians and surgeons, 98 were nurses, 48 were paramedics, and 62 were administrative staff, including HR personnel. According to age details, 8% were less than 23, 40% were 24–30 years of age, 36% were 31–40 years of age, and 24% were 41–59 years of age. As per length of experience, 25% of respondents had 1–2 years' experience, 18% between 2 and 6 years' experience, 11% between 8 and 20 years' experience, and 46% between 20 and 34 years' experience.

4.2. Measurement Instrument

The scale (questionnaire) had forty items (questions) that were responded to on a five-point Likert-type scale: 18 items for electronic performance appraisal, 12 items for organizational sustainability, and 10 items for transformational leadership were in the questionnaire. The questionnaire for e-PA was adopted from Ullah, Z. et al. [5] and organizational social sustainability was taken from Cella-De-Oliveira [3] and transformational leadership adopted from MLQ [77]. Since standard instruments were adopted with already determined reliability co-efficient, the instruments were presumed to be reliable. For the sake of this study, and to be on the safe side, internal reliability analysis tests and validity tests were run again to establish the reliability and validity of instruments.

4.3. Analysis of Data

Inferential statistics were applied to analyze the data. Partial least square (PLS) analysis was used for structural equation modeling (SEM). This method allows researchers to analyze structural components (path model) and measurement components (factor model) in one model simultaneously [78]. Hence, structural equation modeling (SEM) draws an all-inclusive picture of the validity, reliability, and causality [79].

5. Results

5.1. Reliability

Prior to testing our hypotheses, we conducted confirmatory factor analysis (CFA) to establish convergent and discriminant validity. All the three variables of the study, electronic performance appraisal, transformational leadership, and organizational social

sustainability, were constructs and needed operationalization. Thus, confirmation of reliability and validity was needed prior to applying inferential statistics.

All the three variables were found reliable, as Cronbach's alpha values for all the variables (organizational social sustainability 0.903, transformational leadership 0.871, and re-performance appraisal 0.887) were much higher than the cut-off value of 0.7 [80]. In the same way, the composite reliability of each variable was above 0.90, which is higher than the threshold value of 0.70 [81].

5.2. Validity

The average variance extracted (AVE) values for all three variables were above 0.50, which is the threshold value (see in Table 1), thereby establishing convergent validity for each construct. Discriminant validity was assessed using the Fornell and Larcker criterion [82] and Heterotrait–Monotrait (HTMT) ratio, as suggested by Henseler et al. [83]. According to [83] the Fornell–Larcker criterion, a concept or construct would explain the variance of its indicators better than the variance of other constructs of a model [82]. Therefore, in this study, each construct has a greater value than the correlations of other constructs, establishing high discriminant validity (Table 2). Using the (HTMT) criterion, the values above 0.9 showed a lack of discriminant validity [83], which was not the case for the values in Table 3.

Table 1. Construct reliability and validity.

	Cronbach's Alpha	rho_A	Composite Reliability	(AVE)
SOS	0.903	0.904	0.920	0.562
TL	0.871	0.874	0.903	0.609
e-PA	0.887	0.888	0.909	0.525

Table 2. Discriminant validity (Fornell–Larcker).

	SOS	TL	ePA
SOS	0.750		
TL	0.666	0.781	
ePA	0.731	0.669	0.735

Table 3. Discriminant validity (HTMT).

	SOS	TL	ePA
SOS	0.793		
TL	0.746	0.812	
ePA	0.812	0.761	0.796

5.3. Structural Equation Modeling (Hypothesis Testing)

The correlation matrix indicates positive relationships among variables. Organizational social sustainability (SOS) and the other variables are significantly associated (Table 4). Since no value in the correlation matrix is above 0.8, so we can rule out the possibility of autocorrelation.

Table 4. Correlation coefficients.

	SOS	TL	ePA
SOS	1		
TL	0.666	1	
ePA	0.731	0.669	1

As far as a coefficient of determination explains the cause and effect relationship, a 59% variation in the criterion variable (organizational social sustainability) is explained by the given independent variables (electronic performance appraisal system and transformational leadership) as shown in Table 5.

Table 5. R square.

	R Square	R Square Adjusted
SOS	0.591	0.587

For hypothesis testing, we performed two types of structural analysis using SmartPLS (Table 6). Firstly, direct effects of electronic performance appraisal (e-PA) and transformational leadership on organizational social sustainability (SOS) were tested. The direct effect of e-PA on SOS: $\beta = 0.514$, $t = 7.629$ and $p = 0.000$; and TL on SOS: $\beta = 0.327$, $t = 5.127$ and $p = 0.000$. The relationships were positive and significant. Furthermore, the results showed a good fit for data. As far as e-PA and SOS are concerned, the relationship is significant at $p = 0.000$, positive, and quite strong at path coefficient 0.514; and t statistics (7.629) also confirm that the value is much larger than 1.645, indicating greater evidence against the null hypothesis. The relationship between TL and SOS is also significant at $p = 0.000$, positive, and strong at $\beta = 0.327$; and the t statistic of 5.127 shows sufficient evidence against the null hypothesis.

Table 6. Path coefficient.

	Original Sample (O)	Sample Mean (M)	(STDEV)	T Statistics	p Values
Moderating Effect 1 -> SOS	0.016	0.027	0.09	0.175	0.861
TL -> SOS	0.327	0.326	0.064	5.127	0.000
e-PA -> SOS	0.514	0.502	0.067	7.629	0.000

Secondly, the authors introduced TL as a moderator between the relationship of e-PA and SOS. The bootstrapping option was used to test the moderating effect. After evaluation using beta (0.016), p -value (0.861), and t statistics (0.175) we arrived at the conclusion that TL did not moderate the relationship between e-PA and SOS. The relationship is too weak to accept ($\beta = 0.016$) and insignificant at $p = >0.05$ (0.861), and the t statistics show greater evidence in favor of null hypothesis at 0.175, which is much lower than the threshold value.

6. Discussion

Performance appraisal is one of the key HR practices, and many strategic decisions are taken in light of performance appraisal reports [70]. Performance appraisal has direct bearings on organizational outcomes. Ultimately the failure and success of an organization are partly contingent upon the accuracy of performance appraisal systems. HR managers keep on endeavoring to bring accuracy, justice, timeliness, and objectivity; and one of their endeavors is the digitalization of the performance appraisal system [5]. The introduction of information technology and computer systems in PA has made it relatively more effective and efficient. In addition to precisely measuring performance, the e-PA system has minimized rater error and biasness to a great extent [5], so it is likely to augment employees' positive attitudes towards the organization.

Organizational social sustainability is one of the key elements of organizational effectiveness. Social sustainability is the source that could enable organizations to grow and gain sustainable competitive advantages in highly volatile and uncertain environments [69]. Organizations think at strategic levels about how to achieve social sustainability with the organization. E-PA and SOS have a certain history in the literature of developed countries; however, these are becoming the new normal in developing countries and are yet to be

documented extensively. Keeping the scarcity of literature in mind, we proposed a quite simple though novel model to test in this study. The study produced some interesting results. Firstly as per our assumption, the findings revealed an influence of e-PA on SOS, but the relationship was stronger than what could be expected. There are many factors within and outside the organizations that affect the formation of social sustainability. For example, a conducive work environment, remuneration, career growth opportunities, the market, and overall employment conditions may have direct or indirect bearings on social sustainability in organizations. In the face of such diverse and complex conditions, identification of this huge role of e-PA in developing social sustainability is a significant development for managers and researchers. It is evident from the results that employees are very conscious regarding the fairness, objectivity, and accuracy of performance appraisals, and any discrepancy in this matter will dissatisfy them and provoke their turnover intentions. Therefore, managers who are mindful of social sustainability should strengthen their PA through the application of digital technology.

Transformational leadership is supposed to be an exhaustive and extensive phenomenon that encompasses and affects the attitude of employees at all levels [50]. We supposed that the element of transformation leadership will positively moderate the relationship between e-PA and SOS, but surprisingly our results did not support our hypothesis. However, our data verified a positive and significant direct effect of transformational leadership on organizational social sustainability. It is evident from the findings that followers depend on leaders when the situation is subjective and beyond their understanding and interpretations. However, when employees can understand on their own, they keep themselves independent of leaders. Thus, if the digitally generated PA report is perceived to be objective, unbiased, accurate, self-explanatory, and easy to understand, employees feel no need for any guidance to understand it. This kind of PA is possible with the help of information and computer technology.

6.1. Implications of the Study

The study findings have both theoretical and managerial implications. To some extent, the study could create awareness regarding the importance of social sustainability in organizations. It also emphasizes that technological intervention and digitalization of organizational practices, particularly e-PA, produce greater outputs for organizations. Apart from other benefits of the e-PA, it shapes employees' perceptions positively and plays a greater role in the formation of social sustainability in organizations. Transformational leadership also plays a role in the formation of social sustainability, but its contribution, as per our findings, is less significant than that of the e-PA. The study also revealed that technological interventions neutralize the role of leadership. The digitally conducted performance appraisal is more objective, detailed, fair, and easy to understand than the traditional PA, so this enables employees to understand their strengths and weaknesses without the help of a leader. Thus this clarity of understanding reduces their dependence on leaders. Based on the findings of the study, we can extend the following recommendations for practitioners:

- In the face of changing environments, acute competition, and volatile market conditions, social sustainability is the most important weapon to combat these kinds of challenges. As the concept of social sustainability is naïve in the given organizational environment and usually given the least importance, it is imperative for managers to take it up at strategic levels.
- Transformation of the PA from traditional to digital yields many positive outcomes. The e-PA is not a common practice in Pakistani organizations, so it is the call of the day to accept, welcome, and adopt this technological intervention to acquire its multiple benefits, including improving social sustainability.
- It looks important to strengthen PA through IT and computers before one thinks of bringing social sustainability to an organization.

- Transformational leadership is an important factor that influences social sustainability, while where technology comes into play, the role of transformational leader diminishes.

6.2. Conclusions

The study revolves around the phenomenon of organizational social sustainability. In the context of developing countries, particularly Pakistan, this term is relatively new. It is important to make managers realize the importance of social sustainability in the overall growth and success of an organization. Likewise, electronic performance appraisal is also a new adventure within organizations in developing countries. By keeping in view the multiple benefits of e-PA, organizations are transforming their practices from traditional ways to digital and technology-based modes. Since both the phenomena are newly born in this context, we attempted to see the role of e-PA in SOS and any possible moderating role of TL on the relationship between e-PA and SOS. We chose the healthcare sector for data collection because it is a service and labor-intensive industry, and social sustainability is more relevant to this sector. Since e-PA is not commonly practiced in hospitals, we hardly found four hospitals practicing e-PA for the last five or more than five years. Using the survey method, data were collected through the administration of questionnaires. The results were quite surprising. Our first hypothesis concerning the effect of e-PA on SOS was supported and the relationship was stronger than one could expect. In the presence of many other factors that reportedly influence SOS, such a considerable amount of influence is unexpected. Our second hypothesis regarding the moderating effect of TL on the relationship between e-PA and SOS was not accepted and the understanding we got out of it is that technology neutralizes leadership's influence. When technology explains things, people do not use leadership services per se. Our findings have theoretical and practical importance, as they address many important variables that have profound implications on organizational outcomes.

Author Contributions: All of the authors contributed to conceptualization, formal analysis, investigation, methodology, and writing and editing of the original draft. All authors have read and agreed to the published version of the manuscript.

Funding: This research received no external funding.

Informed Consent Statement: Informed consent was obtained from the respondents of the survey.

Data Availability Statement: The data will be made available on request from the corresponding author.

Conflicts of Interest: The authors declare no conflict of interest.

References

1. Mohrman, S.A.; Worley, C.G. The organizational sustainability journey: Introduction to the special issue. *Organ. Dyn.* **2010**, *39*, 289–294. [[CrossRef](#)]
2. Bann, S.; Edwards, M.; Williams, T. *Organizational Change for Corporate Sustainability*; Routledge: London, UK, 2014.
3. Cella-De-Oliveira, F.A. Indicators of organizational sustainability: A proposition from organizational competences. *Int. Rev. Manag. Bus. Res.* **2013**, *2*, 962.
4. Von Zedtwitz, M.; Gassmann, O. Market versus technology drive in R&D internationalization: Four different patterns of managing research and development. *Res. Policy* **2002**, *31*, 569–588.
5. Ullah, Z.; Ahmad, N.; Scholz, M.; Ahmed, B.; Ahmad, I.; Usman, M. Perceived accuracy of electronic performance appraisal systems: The case of a non-for-profit organization from an emerging economy. *Sustainability* **2021**, *13*, 2109. [[CrossRef](#)]
6. Kuvaas, B. Performance appraisal satisfaction and employee outcomes: Mediating and moderating roles of work motivation. *Int. J. Hum. Resour. Manag.* **2006**, *17*, 504–522. [[CrossRef](#)]
7. Pieterse, A.N.; Van Knippenberg, D.; Schippers, M.; Stam, D. Transformational and transactional leadership and innovative behavior: The moderating role of psychological empowerment. *J. Organ. Behav.* **2010**, *31*, 609–623. [[CrossRef](#)]
8. Kroll, A.; Vogel, D. The PSM-leadership fit: A model of performance information use. *Public Adm.* **2014**, *92*, 974–991. [[CrossRef](#)]
9. Moynihan, D.P.; Pandey, S.K.; Wright, B.E. Prosocial values and performance management theory: Linking perceived social impact and performance information use. *Governance* **2012**, *25*, 463–483. [[CrossRef](#)]

10. Oberfield, Z.W. Public management in time: A longitudinal examination of the full range of leadership theory. *J. Public Adm. Res. Theory* **2014**, *24*, 407–429. [[CrossRef](#)]
11. Park, S.M.; Rainey, H.G. Leadership and public service motivation in US federal agencies. *Int. Public Manag. J.* **2008**, *11*, 109–142. [[CrossRef](#)]
12. Trottier, T.; Van Wart, M.; Wang, X. Examining the nature and significance of leadership in government organizations. *Public Adm. Rev.* **2008**, *68*, 319–333. [[CrossRef](#)]
13. Beeri, I.; Dayan, R.; Vigoda-Gadot, E.; Werner, S.B. Advancing ethics in public organizations: The impact of an ethics program on employees' perceptions and behaviors in a regional council. *J. Bus. Ethics* **2013**, *112*, 59–78. [[CrossRef](#)]
14. Schaltegger, S.; Burritt, R. Corporate sustainability. *Int. Yearb. Environ. Resour. Econ.* **2005**, *2006*, 185–222.
15. Sodhi, M.S.; Tang, C.S. Corporate social sustainability in supply chains: A thematic analysis of the literature. *Int. J. Prod. Res.* **2018**, *56*, 882–901. [[CrossRef](#)]
16. Ahmad, N.; Mahmood, A.; Han, H.; Ariza-Montes, A.; Vega-Muñoz, A.; Din, M.u.; Iqbal Khan, G.; Ullah, Z. Sustainability as a “New Normal” for Modern Businesses: Are SMEs of Pakistan Ready to Adopt It? *Sustainability* **2021**, *13*, 1944. [[CrossRef](#)]
17. Ahmad, N.; Mahmood, A.; Ariza-Montes, A.; Han, H.; Hernández-Perlines, F.; Araya-Castillo, L.; Scholz, M. Sustainable Businesses Speak to the Heart of Consumers: Looking at Sustainability with a Marketing Lens to Reap Banking Consumers' Loyalty. *Sustainability* **2021**, *13*, 3828. [[CrossRef](#)]
18. Paulraj, A. Understanding the relationships between internal resources and capabilities, sustainable supply management and organizational sustainability. *J. Supply Chain Manag.* **2011**, *47*, 19–37. [[CrossRef](#)]
19. Smith, P.A.; Sharic, C. The shift needed for sustainability. *Learn. Organ.* **2011**, *18*, 73–86. [[CrossRef](#)]
20. Giovannoni, E.; Fabietti, G. What is sustainability? A review of the concept and its applications. In *Integrated Reporting*; Springer: Berlin/Heidelberg, Germany, 2013; pp. 21–40.
21. Smith, P.A.; Wals, A.E.; Schwarzin, L. Fostering organizational sustainability through dialogic interaction. *Learn. Org.* **2012**, *19*, 11–27.
22. Coblenz, J.B. Organizational Sustainability: The three aspects that matter. In Proceedings of the ERNWACA's First Strategy Session, Dakar, Senegal, 4–5 March 2002.
23. Agyeman, J.; Warner, K. Putting 'just sustainability' into place: From paradigm to practice. *Policy Manag. Rev.* **2002**, *2*, 8.
24. Meyer, J.L.; Helfman, G.S. The ecological basis of sustainability. *Ecol. Appl.* **1993**, *3*, 569–571. [[PubMed](#)]
25. Fiorino, D.J. Sustainability as a conceptual focus for public administration. *Public Adm. Rev.* **2010**, *70*, s78–s88. [[CrossRef](#)]
26. Hasna, A. Dimensions of sustainability. *J. Eng. Sustain. Community Dev.* **2007**, *1*. [[CrossRef](#)]
27. Opp, S.M.; Saunders, K.L. Pillar talk: Local sustainability initiatives and policies in the United States—Finding evidence of the “three E's”: Economic development, environmental protection, and social equity. *Urban Aff. Rev.* **2013**, *49*, 678–717. [[CrossRef](#)]
28. Stazyk, E.C.; Moldavanova, A.; Frederickson, H.G. Sustainability, intergenerational social equity, and the socially responsible organization. *Adm. Soc.* **2016**, *48*, 655–682. [[CrossRef](#)]
29. Dempsey, N.; Bramley, G.; Power, S.; Brown, C. The social dimension of sustainable development: Defining urban social sustainability. *Sustain. Dev.* **2011**, *19*, 289–300. [[CrossRef](#)]
30. Koppenjan, J.F.; Enserink, B. Public–private partnerships in urban infrastructures: Reconciling private sector participation and sustainability. *Public Adm. Rev.* **2009**, *69*, 284–296. [[CrossRef](#)]
31. Vallance, S.; Perkins, H.C.; Dixon, J.E. What is social sustainability? A clarification of concepts. *Geoforum* **2011**, *42*, 342–348. [[CrossRef](#)]
32. Lee, C.M.J.; Che-Ha, N.; Alwi, S.F.S. Service customer orientation and social sustainability: The case of small medium enterprises. *J. Bus. Res.* **2021**, *122*, 751–760. [[CrossRef](#)]
33. Sajjad, A.; Shahbaz, W. Mindfulness and social sustainability: An integrative review. *Soc. Indic. Res.* **2020**, *150*, 73–94. [[CrossRef](#)]
34. Gálvez, A.; Tirado, F.; Martínez, M.J. Work–life balance, organizations and social sustainability: Analyzing female telework in Spain. *Sustainability* **2020**, *12*, 3567. [[CrossRef](#)]
35. Pasaribu, S.I.; Vanclay, F.; Zhao, Y. Challenges to implementing socially-sustainable community development in oil palm and forestry operations in Indonesia. *Land* **2020**, *9*, 61. [[CrossRef](#)]
36. Polèse, M.; Stren, R.E.; Stren, R. *The Social Sustainability of Cities: Diversity and the Management of Change*; University of Toronto Press: Toronto, ON, Canada, 2000.
37. Su, X.; Liu, Y.; Hanson-Rasmussen, N. Voice behavior, supervisor attribution and employee performance appraisal. *Sustainability* **2017**, *9*, 1829. [[CrossRef](#)]
38. Du Plessis, C. A strategic framework for sustainable construction in developing countries. *Constr. Manag. Econ.* **2007**, *25*, 67–76. [[CrossRef](#)]
39. Bonn, I.; Fisher, J. Sustainability: The missing ingredient in strategy. *J. Bus. Strategy* **2011**, *32*, 5–14. [[CrossRef](#)]
40. Parida, V.; Sjödin, D.; Reim, W. Reviewing literature on digitalization, business model innovation, and sustainable industry: Past achievements and future promises. *Sustainability* **2019**, *11*, 391. [[CrossRef](#)]
41. Gonzalez, R.; Koizumi, D.; Kusiak, K. E-HRM and Its Outcomes: A Study of Relational e-HRM in Multinational Companies. Bachelor's Thesis, Jonkoping International Business School, University of Jonkoping, Jonkoping, Sweden, 2011.
42. Markoulli, M.P.; Lee, C.I.; Byington, E.; Felps, W.A. Mapping Human Resource Management: Reviewing the field and charting future directions. *Hum. Resour. Manag. Rev.* **2017**, *27*, 367–396. [[CrossRef](#)]

43. Pires, P.M.d.S. E-HRM: Unveiling the Hidden Dimensions of Value Creation Within Strategic Human Resources Management using Human Resources Information Systems: A Case Study Analysis. Master's Thesis, ISCTE—Lisbon University Institute, Lisbon, Portugal, 2018.
44. Pulakos, E.D. *Performance Management: A Roadmap for Developing, Implementing and Evaluating Performance Management Systems*; SHRM Foundation: Alexandria, VA, USA, 2004.
45. Twomey, D.F.; Harris, D.L. From strategy to corporate outcomes: Aligning human resource management systems with entrepreneurial intent. *Int. J. Commer. Manag.* **2000**, *10*, 43–55. [[CrossRef](#)]
46. Ngo Thi Vo, H. The Impact of E-HR on the Roles and Competencies of HR. Master's Thesis, Department of Management, Faculty of Business Studies, University of Vaasa, Vaasa, Finland, 2011.
47. Song, M.-L.; Fisher, R.; Wang, J.-L.; Cui, L.-B. Environmental performance evaluation with big data: Theories and methods. *Ann. Oper. Res.* **2018**, *270*, 459–472. [[CrossRef](#)]
48. Burns, J.M. Transformational Leadership Theory. In *Leadership*; Harper Collins: New York, NY, USA, 1978.
49. Burke, C.S.; Sims, D.E.; Lazzara, E.H.; Salas, E. Trust in leadership: A multi-level review and integration. *Leadersh. Q.* **2007**, *18*, 606–632. [[CrossRef](#)]
50. Judge, T.A.; Piccolo, R.F. Transformational and transactional leadership: A meta-analytic test of their relative validity. *J. Appl. Psychol.* **2004**, *89*, 755. [[CrossRef](#)] [[PubMed](#)]
51. Wang, P.; Rode, J.C. Transformational leadership and follower creativity: The moderating effects of identification with leader and organizational climate. *Hum. Relat.* **2010**, *63*, 1105–1128. [[CrossRef](#)]
52. Bass, B.M.; Riggio, R.E. *Transformational Leadership*, 2nd ed.; Lawrence Erlbaum Associates: Mahwah, NJ, USA, 2006.
53. Pawar, B.S.; Eastman, K.K. The nature and implications of contextual influences on transformational leadership: A conceptual examination. *Acad. Manag. Rev.* **1997**, *22*, 80–109. [[CrossRef](#)]
54. Bass, B.M.; Waldman, D.A.; Avolio, B.J.; Bebb, M. Transformational leadership and the falling dominoes effect. *Group Organ. Stud.* **1987**, *12*, 73–87. [[CrossRef](#)]
55. Seltzer, J.; Bass, B.M. Transformational leadership: Beyond initiation and consideration. *J. Manag.* **1990**, *16*, 693–703. [[CrossRef](#)]
56. Khattak, M.N.; Zolin, R.; Muhammad, N. Linking transformational leadership and continuous improvement. *Manag. Res. Rev.* **2020**. [[CrossRef](#)]
57. Barbuto, J.E. Taking the charisma out of transformational leadership. *J. Soc. Behav. Personal.* **1997**, *12*, 689.
58. Gillespie, N.A.; Mann, L. Transformational leadership and shared values: The building blocks of trust. *J. Manag. Psychol.* **2004**, *19*, 588–607. [[CrossRef](#)]
59. Baptista, J.; Stein, M.-K.; Klein, S.; Watson-Manheim, M.B.; Lee, J. *Digital Work and Organisational Transformation: Emergent Digital/Human Work Configurations in Modern Organisations*; Elsevier: Amsterdam, The Netherlands, 2020.
60. Ruel, H.J.; Bondarouk, T.V.; Van der Velde, M. The contribution of e-HRM to HRM effectiveness: Results from a quantitative study in a Dutch Ministry. *Empl. Relat.* **2007**, *29*, 280–291. [[CrossRef](#)]
61. Van Marrewijk, M.; Werre, M. Multiple levels of corporate sustainability. *J. Bus. Ethics* **2003**, *44*, 107–119. [[CrossRef](#)]
62. Bouzguenda, I.; Alalouch, C.; Fava, N. Towards smart sustainable cities: A review of the role digital citizen participation could play in advancing social sustainability. *Sustain. Cities Soc.* **2019**, *50*, 101627. [[CrossRef](#)]
63. Whatley, M.A.; Webster, J.M.; Smith, R.H.; Rhodes, A. The effect of a favor on public and private compliance: How internalized is the norm of reciprocity? *Basic Appl. Soc. Psychol.* **1999**, *21*, 251–259. [[CrossRef](#)]
64. Widok, A.H. Social Sustainability: Theories, Concepts, Practicability. In Proceedings of the Environmental Informatics and Industrial Environmental Protection: Concepts, Methods and Tools (EnviroInfo 2009), Berlin, Germany, 9–11 September 2009; pp. 43–51.
65. Blau, P.M. Social Exchange Theory. In *Exchange and Power in Social Life*; Transaction Publishers: Piscataway, NJ, USA, 1964; p. 62.
66. Cropanzano, R.; Mitchell, M.S. Social exchange theory: An interdisciplinary review. *J. Manag.* **2005**, *31*, 874–900. [[CrossRef](#)]
67. Dillard, J.; Dujon, V.; King, M.C. *Understanding the Social Dimension of Sustainability*; Routledge: London, UK, 2008.
68. Littig, B.; Griessler, E. Social sustainability: A catchword between political pragmatism and social theory. *Int. J. Sustain. Dev.* **2005**, *8*, 65–79. [[CrossRef](#)]
69. Eizenberg, E.; Jabareen, Y. Social sustainability: A new conceptual framework. *Sustainability* **2017**, *9*, 68. [[CrossRef](#)]
70. Ilgen, D.R.; Feldman, J.M. Performance appraisal: A process focus. *Res. Organ. Behav.* **1983**, *5*, 141–197.
71. Al-Raisi, A.; Amin, S.; Tahir, S. Evaluation of e-performance analysis and assessment in the United Arab Emirates (UAE) Organizations. *J. Internet Inf. Syst.* **2011**, *2*, 20–27.
72. Warrick, D. The urgent need for skilled transformational leaders: Integrating transformational leadership and organization development. *J. Leadersh. Account. Ethics* **2011**, *8*, 11–26.
73. Bass, B.M.; Steidlmeier, P. Ethics, character, and authentic transformational leadership behavior. *Leadersh. Q.* **1999**, *10*, 181–217. [[CrossRef](#)]
74. Fletcher, C. Performance appraisal and management: The developing research agenda. *J. Occup. Organ. Psychol.* **2001**, *74*, 473–487. [[CrossRef](#)]
75. London, M.; Smither, J.W. Can multi-source feedback change perceptions of goal accomplishment, self-evaluations, and performance-related outcomes? Theory-based applications and directions for research. *Pers. Psychol.* **1995**, *48*, 803–839. [[CrossRef](#)]

76. Goodyear, M.D.; Krleza-Jeric, K.; Lemmens, T. The declaration of Helsinki. *BMJ* **2007**. [[CrossRef](#)] [[PubMed](#)]
77. Van Knippenberg, D.; Sitkin, S.B. A critical assessment of charismatic—transformational leadership research: Back to the drawing board? *Acad. Manag. Ann.* **2013**, *7*, 1–60. [[CrossRef](#)]
78. Hair, J.F., Jr.; Sarstedt, M.; Hopkins, L.; Kuppelwieser, V.G. Partial least squares structural equation modeling (PLS-SEM): An emerging tool in business research. *Eur. Bus. Rev.* **2014**, *26*, 106–121. [[CrossRef](#)]
79. Sarstedt, M.; Hair, J.F., Jr.; Cheah, J.-H.; Becker, J.-M.; Ringle, C.M. How to specify, estimate, and validate higher-order constructs in PLS-SEM. *Australas. Mark. J.* **2019**, *27*, 197–211. [[CrossRef](#)]
80. Tavakol, M.; Dennick, R. Making sense of Cronbach’s alpha. *Int. J. Med. Educ.* **2011**, *2*, 53. [[CrossRef](#)] [[PubMed](#)]
81. Hoyle, R.H. The Structural Equation Modeling Approach: Basic Concepts and Fundamental Issues. In *Structural Equation Modeling: Concepts, Issues, and Applications*; Sage Publications: Thousand Oaks, CA, USA, 1995.
82. Ab Hamid, M.; Sami, W.; Sidek, M.M. Discriminant validity assessment: Use of Fornell & Larcker criterion versus HTMT criterion. *J. Phys. Conf. Ser.* **2017**, *890*, 012163.
83. Henseler, J.; Ringle, C.M.; Sinkovics, R.R. The use of Partial Least Squares Path Modeling in International Marketing. In *New Challenges to International Marketing*; Emerald Group Publishing Limited: Bingley, UK, 2009.