



Dilemma of Responsible Leadership in Pakistan: Finding the Fulcrum Between Responsibilities and Resources using Delphi, DEMATEL, and ANP

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Abstract: Responsible leadership entails balancing the needs of various stakeholders, yet resource constraints and the pursuit of visible benefits for both the community and the organization pose challenges. This study proposes a methodology to identify the most essential and impactful responsibilities for leaders. Utilizing the Delphi technique, decision making trial and evaluation laboratory (DEMATEL), and analytical network process (ANP), data were collected from 40 respondents representing diverse stakeholder groups. The study first identified five major criteria through Delphi technique which included: (a) needs of the surrounding community, (b) areas with minimal government support, (c) enhancement of organizational image, (d) contribution to organizational performance, and (e) quantity of resources required. DEMATEL analysis revealed that criterion (e) was the most influential, followed by (b), (c), (a), and (d). Criteria (a), (b), and (c) acted as influencers, whereas (d) and (e) were receivers. Then, using the Delphi technique, five key responsibilities were identified: (R1) supporting children's education, (R2) capacity building for the local community, (R3) setting up water filtration plants, (R4) improving the working environment, and (R5) reducing discrimination. ANP analysis prioritized these responsibilities according to the already identified criteria as R1, R2, R5, R4, and R3 respectively. This structured approach is expected to guide leaders in making decisions to allocate resources optimally, thereby maximizing benefits for both the organization and the community.

Keywords: Responsibility, Responsible Leadership, Decision Making, Social Responsibility, Community, Welfare

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1. Introduction

Responsible leadership is characterized by a high sensitivity to responsibilities and obligations toward diverse stakeholders. Responsible leaders go beyond the usually conceptualized dyadic relationship between a leader and a follower and embrace a broader spectrum of responsibilities (Pless & Maak, 2022). An overwhelming emphasis on responsibilities earns responsible leaders the trust, respect, and willing cooperation of their followers (Javed et al., 2020). The sincere fulfillment of different responsibilities enhances the effectiveness of responsible leaders by connecting the workplace with virtuousness and spirituality (Bhatti et al., 2022). Followers closely and critically observe the fulfillment of various responsibilities, forming an image of the leader in their minds based on both positive and negative observations. In essence, followers instinctively search for their own roles within the broader scope of their leaders' responsibility-orientation (Cyfert et al., 2022). Leaders fulfilling their responsibilities, along with

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followers' perceptions of their roles, help followers visualize the meaningfulness of their work within the organization (Lips-Wiersma et al., 2020).

The concept of responsible leadership can be seen as a response to the proponents of profit maximization, aiming to restrain the blind pursuit of profits by organizational leaders (Rego et al., 2009). The responsible leadership construct is still evolving, with scholars in both management and leadership disciplines discovering its veiled dimensions and exploring its philosophical foundations (Zhao et al., 2023). Responsible leadership is considered at the intersection of ethics, leadership, and corporate social responsibility (Ciulla, 2004; Voegtlin, 2011). The initial definition evolved by Maak and Pless (2006) declared responsible leadership "a relational and ethical phenomenon that occurs in social processes of interaction with those who affect or are affected by leadership and have a stake in the purpose and vision of the organization." Scholars later added other perspectives to the definition, such as redefining it as a type of leadership that emphasizes responsibility and focuses on others, particularly those for whom a leader bears responsibility (Cameron, 2011).

Responsible leaders have an obligation to answer to stakeholders for all aspects of their businesses, including the potential impact on the communities they operate in (Miska et al., 2014). Bhatti et al. (2023) assess responsible leaders by evaluating their conduct in six overarching areas of responsibility: ethical, social, business, leadership, legal, and environmental. It is clear that each category of tasks has several requirements, which presents a substantial challenge for the leaders to prioritize all responsibilities equally because of limited resources. Zhang and Liu (2016) anticipate that responsible leadership will realign organizational resources to fulfill pertinent social, environmental, and future obligations. As effective leaders must prioritize their obligations and allocate resources, with a focus on more vital commitments and obligations within a particular commercial, social, economic, and cultural context.

In order to prioritize responsibilities and allocate resources effectively, leaders often rely on their intuition and subjective assessments (Schaedler et al., 2022). The board of directors typically makes these decisions based on the priorities proposed by the chief executive officer (CEO) or the managing director (MD) (Bhatti et al., 2023). The present literature on methods of determining, segregating, and prioritizing responsibilities for an appropriate allocation and distribution of resources to fulfill them is scarce. Only a few studies (Tsai & Hsu, 2008) have proposed methods that combine numerous techniques to determine the social responsibilities (CSR) that an organization should undertake. Overcomplication and a plethora of calculations mar the effectiveness of such hybrid methods, making their use by organizational leaders difficult without adding much value to the decisions. Rationally, the suggested methods seem to assist the leaders but fail to provide a simple, understandable, value-adding, and parsimonious tool for decision-making (Schaedler et al., 2022; Zhang & Liu, 2016).

The present study is founded on the principle that assessments by leaders, managers and stakeholders form the basis for all decisions regarding the selection and prioritization of responsibilities. Statistical and arithmetic analysis techniques substantiate human assessments, demonstrating the linkages of factors likely to influence decisions. It is suggested that organizational leaders utilize the proposed method, which combines three main techniques: Delphi, decision making trial and evaluation laboratory (DEMATEL), and analytical network process (ANP), to determine and prioritize tasks. This method is designed to be easy to understand and apply. The findings of this study are expected to simplify the application of expert assessments to business situations through a combination of data extraction and analysis, thereby enhancing the decision-making toolkit of organizational leaders.

2. Review of Literature

2.1. Responsible Leadership and Responsibilities

Responsible leadership emerged from the integration of leadership, ethics, and corporate social responsibility (Muff et al., 2022). Maak and Pless (2011) initially defined responsible leadership as a relational and ethical phenomenon that occurs in social processes of interaction, involving those who affect or are

affected by leadership and have a stake in its purpose and vision. Cameron (2011) later expanded this definition, emphasizing a stakeholder orientation with a particular focus on accountability and responsibility. Scholars continue to explore various facets of responsible leadership in relation to stakeholder interests and societal obligations. For this study, the definition by Christian Voegtlin (2011) is adopted, which describes responsible leadership as a type of leadership having awareness and consideration of the consequences of its actions for all stakeholders, as well as exerting influence by involvement and engagement of the affected stakeholders through an active dialogue (Voegtlin, 2011).

Maak and Pless (2011) posit that responsible leadership is accountable to both internal and external stakeholders who are directly or indirectly affected by an organization's decisions and practices (Adler & Laasch, 2020). Unlike other types of leadership that primarily focus on relations with followers or employees, responsible leadership places significant emphasis on relationships with all relevant stakeholders (Trevino et al., 2003; Zhao & Zhou, 2019). The influence of responsible leadership on stakeholder behavior varies with the degree to which relevant responsibilities are fulfilled (Miska et al., 2014). This concern for meeting diverse stakeholder responsibilities enhances the influence of responsible leaders. Moreover, responsible leadership directly affects organizational members, who constitute the major internal stakeholders (Philips & Freeman, 2003). The literature underscores the impact of responsible leaders, highlighting their role as role models and their ability to inspire others to demonstrate responsibility (Voegtlin, 2011).

The actions of responsible leaders significantly influence the external perception of an organization, particularly its relationships with external stakeholders (Maak & Pless, 2011). In fulfilling their responsibilities, responsible leaders generate social capital and goodwill for the organization (Maak, 2007; Wang et al., 2015). They engage all stakeholders through constructive dialogue, fostering frequent interaction, involvement in decision-making, and the creation of mutually beneficial business and social relationships (Maak, 2007; Schinzel, 2019; Voegtlin et al., 2012; Zhao & Zhou, 2019). The synergy created by responsible leaders draws strength from the intelligent choices made by them for the welfare and wellbeing of stakeholders. The desired effects for a positive change may have to be executed through different forms of collaborations like partnership, financial support, provision of non-monetary resources, and expertise etc., for which criteria and priorities will have to be decided by leaders (Chatterjee et al., 2022; Zhao & Yin, 2024).

2.2. Choice of Responsibilities from a Myriad – A Dictate of Resource Constraints

The demarcation of the extents of responsibilities that responsible leaders must focus on has been a significant challenge (Brimhall & Mor Barak, 2018). The literature indicates that the boundaries of responsible leadership cannot be precisely determined regarding the selection or rejection of particular responsibilities (Martinescu et al., 2021). The specific types of responsibilities that responsible leaders should emphasize are not well-articulated in the literature, revealing a gap in the research (Srivastava et al., 2020). Although scholars have mentioned various responsibilities and areas to focus on, a comprehensive synthesis has yet to be achieved (Doh & Quigley, 2014; Zhao & Zhou, 2019). As a result, the identification and emphasis on responsibilities by responsible leadership often remain limited to the relational dimension (Voegtlin, 2011) or are confined to corporate social responsibility (CSR) only (Agarwal & Bhal, 2020).

It is vital for responsible leaders and organizations to place equal importance on their societal responsibilities and economic goals (Zhao et al., 2023). Many multinational corporations and businesses have successfully established a strong commitment to addressing the environmental, societal, and business aspects of their operations (Roner, 2006). In today's challenging business environment, organizations face the critical task of prioritizing their responsibilities and efficiently allocating and managing resources. With limited resources and rising costs, making strategic decisions is crucial for success (Ur Rehman et al., 2023). Fierce competition, shareholder demands for profitable returns, rising costs across the board, and strict regulations from enforcement agencies all contribute to the complexity and difficulty of making responsible choices (Hu et al., 2022).

Organizations need a methodology for selecting and prioritizing responsibilities that are genuinely beneficial for stakeholders. Simultaneously, resource constraints and business environment uncertainties

necessitate that the methodology be simple and flexible to accommodate prevailing business dynamics (Papalexopoulos et al., 2022). Various methodologies are employed by organizations, ranging from decisions made solely by the head of the organization to the integration of multiple statistical techniques requiring expert input (Islam et al., 2019). Some organizations adopt the Plan-Do-Check-Act (PDCA) cycle approach, as proposed by Shewhart (1986) and Deming (1986). This approach involves five key steps: establishing a vision, planning by identifying stakeholder relations and key performance indicators, implementing activities in coordination with the existing management system, evaluating performance to determine if desired results are being achieved, and taking action to implement successful changes on a larger scale. However, this approach often fails to consider the interconnectedness of criteria and the interrelationships among candidate responsibilities when evaluated by an organization.

Porter and Kramer (2006) affirm that existing approaches to corporate social responsibility (CSR) are often fragmented and lack a connection to business strategy, which prevents organizations from fully realizing the potential benefits they can offer to society. By adopting a strategic approach to social responsibility, corporations can uncover the potential for CSR to become a valuable asset in gaining a competitive edge. Integrating CSR into existing business frameworks, rather than treating it as a separate entity, can yield significant benefits (Sun et al., 2024). Porter and Kramer (2006) emphasize the importance of aligning CSR practices with a firm's specific strategy, rather than adopting generic approaches that may not be appropriate for every business. The four components of CSR—economic, legal, ethical, and philanthropic responsibilities (Carroll, 1996)—provide a method for business leaders to recognize and address the concerns of those impacted by their organization's actions. Therefore, the choice of selecting optimal responsibilities should focus not only on the worthiness of a cause but also on its potential to generate societal benefits while being valuable to the business (Islam et al., 2019; Sun et al., 2024).

Failure to account for the interrelated factors among responsibilities can lead to resource misallocation and financial losses for organizations (Porter & Kramer, 2006; Zhao & Yin, 2024). Organizations must adopt a holistic and comprehensive approach to effectively select responsibilities that benefit both their competitive advantage and society (Porter & Kramer, 2006; Tsang et al., 2023). Porter and Kramer (2006) stress the importance of identifying specific societal problems that companies are capable of addressing and can benefit from in terms of competitive advantage. However, there is a need for a more systematic and unbiased approach among academics and practitioners to determine the most suitable strategic responsibilities, considering diverse cultures and local requirements (Tsang et al., 2023). Husted and Allen (2007) observe that not all market-based projects generate value, and the same applies to the responsibilities undertaken by firms. Some CSR projects result in increased costs despite receiving positive evaluations from various stakeholder groups. Cost-sensitive industries must evaluate the costs associated with selected CSR programs (Husted & Allen, 2007). Cost evaluation enables managers to prepare for performance estimations effectively. Raz and Elnathan (1999) highlight that the activity-based costing (ABC) approach is a suitable method for estimating project costs. By examining the financial details of selected CSR programs, managers can modify their CSR activities accordingly (Park, 2019; Raz & Elnathan, 1999).

Failure to consider the complex relationships between responsibilities can lead to inefficient resource allocation and financial losses for organizations. It is imperative for organizations to adopt a well-rounded approach to selecting responsibilities that benefit both their competitive advantage and society as a whole (Zhao & Yin, 2024). Porter and Kramer (2006) highlight the importance of each company identifying the specific societal challenges it can effectively address and leverage for competitive advantage. However, both academics and practitioners should emphasize a scientific and objective approach in determining the most effective strategic responsibilities, considering diverse cultures and local needs (Zhao & Yin, 2024). Husted and Allen (2007) assert that not all market-based projects generate value, and the same applies to responsibilities within a firm. Several CSR projects result in increased costs, despite receiving positive evaluations from various stakeholder groups. Cost-sensitive industries must evaluate the costs associated with selected CSR programs (Husted & Allen, 2007). Evaluating costs enables business leaders and managers to effectively prepare for performance estimations. Raz and Elnathan (1999) highlight the suitability of the

ABC approach for estimating project costs. Managers can use the cost information from the selected CSR program to make necessary adjustments to their CSR activities (Park, 2019; Raz & Elnathan, 1999).

It is important to note that no single approach can effectively address the various challenges at hand (Sun et al., 2024; Tsang et al., 2023; Zhao & Yin, 2024). These challenges include the complex relationship between society and business, the interdependence of CSR programs, and the limited resources available for CSR activities. Tsai and Hsu (2008) presented a comprehensive solution to the decision-making process of selecting CSR programs in the airline industry. Their approach utilized various methods to address these limitations and provide a cost evaluation solution for industries that prioritize cost sensitivity (Raz & Elnathan, 1999). The hybrid approach is widely recognized as an effective method for gathering input from experts and determining resource allocation priorities, benefiting society while also providing a competitive edge for the organization (Tsai & Hsu, 2008).

3. Methodology

3.1. Sample size and Respondent Characteristics.

This study aims to examine the decision-making process for responsible leadership by utilizing a combination of the Delphi Technique, DEMATEL, and ANP methodologies.

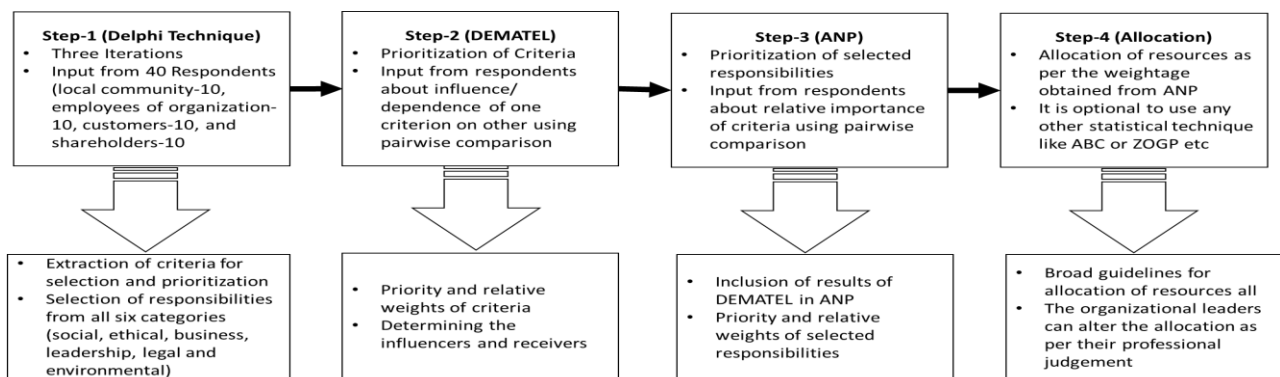
The study sample included a diverse range of stakeholders from various businesses across different regions in Pakistan. The country is among developing nations and has unique peculiarities of cultural, linguistic, geographical, religious, and socio-economic diversity. The study involved participants from major cities like Karachi, Lahore, and Islamabad, as well as smaller towns, in order to provide a comprehensive representation of various geographic areas. The businesses represented had a diverse range of sizes and sectors, encompassing manufacturing, services, and public organizations. This diversity was crucial to capturing a wide range of perspectives and ensuring the findings were generalizable across different contexts within Pakistan. Despite the deeply embedded contextual factors which may have impacted the findings of this study, the proposed methodology is anticipated to be applicable and usable in other countries.

Notably, a sample of 40 participants was selected using the quota sampling method. While a smaller sample size is appropriate for ANP and DEMATEL due to potential inconsistency in responses with larger sample sizes, this sample size was chosen to ensure representation of the majority of relevant stakeholders, as advocated by Saaty and Vargas (1998). The participants included equal representation from four main groups of stakeholders: the surrounding community, organizational members (employees), customers/beneficiaries, and owners/shareholders. Ten participants from each group were selected through the convenience sampling method (Table 1). An overview of the methodology is also presented in Figure 1.

Table 1. Overview of Respondents

Stakeholder Group	Number of Participants
Surrounding Community	10
Organizational Members	10
Customers/Beneficiaries	10
Owners/Shareholders	10
Total	40

Figure 1. Overview of Proposed Methodology



3.2. Delphi Technique

The methodology comprised sequential steps, starting with the Delphi technique for determining the criteria and the set of responsibilities to be prioritized by the organizational leader for emphasis and allocation of resources. Depending upon the availability of resources or any other limitation like time and commitments of experts, the number of iterations of Delphi may be decided to segregate any specific number of responsibilities through the consensus of participants (Drumm et al., 2022). For this study, three rounds of Delphi were conducted. In the initial round, participants were required to list the most essential and impactful responsibilities to be fulfilled by responsible leadership in each of the six categories of responsibilities. The six categories consisted of social, ethical, leadership, business, legal, and environmental responsibilities (Irfan et al., 2021). The initial list encompassing all six categories comprised 146 responsibilities, which needed further reduction to a manageable number of responsibilities for ease of analysis.

Concurrently, the participants identified five major considerations (criteria) for reducing and prioritizing responsibilities: (1) responsibilities driven by the needs of the surrounding community, (2) areas where government support is minimal or non-existent, (3) responsibilities that can significantly enhance organizational image, (4) responsibilities that can considerably contribute to organizational performance, and (5) the quantum of resources required (for deciding on implementation methods such as solo fulfillment, partnerships, or other collaborative arrangements). The second iteration aimed to narrow down the initially listed responsibilities to a smaller set (28, and then 10 responsibilities for this study, regardless of their relation to the six categories of responsibilities). The third iteration of Delphi focused on further reducing the responsibilities to a smaller set of five for this study. This iteration also involved an initial assessment of responsibilities concerning the rough allocation of available resources and suggested methods for execution. The chosen set comprised the five most essential and impactful responsibilities.

3.3. DEMATEL Method

The DEMATEL method is a quantitative technique used to prioritize input values by assessing subjective opinions. The method, developed by the Battelle Memorial Institute's Geneva Research Center in 1976 (Fontela & Gabus, 1976), is proficient in transforming cause-and-effect relationships and examining the structure and interconnections among different options and alternatives. The application of this method has been successfully implemented in several industries, including "aviation safety, e-learning assessment, marketing strategy, control and safety, and sustainable development management systems" (Chiu et al., 2006; Tsai et al., 2009; Tzeng et al., 2007). DEMATEL is a method used to determine the links between identified criteria and the extent to which they depend on each other (Seyed-Hosseini et al., 2006). This technique has been used in numerous leadership studies for prioritizing different responsibilities, competencies, factors, options in varied contingencies (Chatterjee et al., 2022; Mirhosseini et al., 2020; Wang et al., 2023). The procedure entails multiple sequential steps, which are as follows:

1. Gaining input from respondents on the dependence of each criterion on others for inferring binary relations and their strength.
2. Creating direct-relation matrix by comparing the binary relations and their strengths. Values in the direct-relation matrix denote the quantum of direct effect of row item on the column item.
3. Normalizing the direct-relation matrix by dividing each column items with sum of the column.
4. Total Relation Matrix: The total relation matrix is determined by adding together the direct and indirect influences. As per Goodman (1988), this procedure requires subtracting the normalized matrix from the identity matrix and then finding the inverse of the resulting matrix (Seyed-Hosseini et al., 2006).
5. Obtaining the causal diagram by adding all rows and all columns to get their sum. The sum of rows indicates the sum of influence dispatched from one factor to the other factors both directly and indirectly. Similarly, the column sum represents the sum of influence that one factor would receive from the other.

The DEMATEL method is utilized to discern intricate connections and establish a network framework between cost and differentiation advantage criteria (Tzeng et al., 2007). In addition, this approach analyzes the reciprocal connections and the level of interdependence between different criteria (Karsak et al., 2002). The present study utilizes the DEMATEL approach to ascertain the relative significance of each criterion and allocate weights to them. These weights are then utilized to prioritize the obligations that responsible leaders should focus on.

3.4. ANP

There are two techniques for prioritizing different options based on defined criteria: the analytical hierarchy process (AHP) and the analytical network process (ANP). When all criteria are independent of one another, AHP is utilized to ascertain the relative weights of different alternatives (Hsieh et al., 2008). Conversely, ANP is used for prioritizing options when the criteria are interdependent and linked to each other (Saaty & Vargas, 1998). Recent studies have increasingly utilized ANP for prioritizing options and courses of action for organizational leaders (Liu, 2024). ANP is particularly suitable for decision-making involving interconnected and intricate factors, offering decision-makers a comprehensive framework for prioritizing various options and creating models for complex relationships. It is highly adaptable and has been successfully implemented in diverse fields (Akhtar et al., 2023). To decide whether to use ANP or AHP, a threshold value is determined through discussions with experts. Criteria may be deemed independent when the values in the DEMATEL matrix fall below a specified threshold. However, once this threshold is surpassed, the criteria become interdependent. In this study, ANP was utilized due to the interconnectedness of the criteria. ANP, presented by Saaty (2001), is an algorithm used to rank decision priorities without presupposing a unidirectional hierarchical connection between decision levels. ANP provides a network structure that represents real-world decision problems comprehensively. The key components of ANP include the following:

1. The relative importance or strength of each effect on a given element is measured using a scale of 1–9 to represent equal importance to extreme importance (Saaty, 1996).
2. ANP operates in two phases. The initial phase involves building the network. Next, we need to calculate the priorities of the elements.
3. When constructing the issue structure in ANP, all interactions between elements are taken into account, unlike AHP where only top-down interactions are examined (Karsak et al., 2002).
4. The interactions are evaluated using pairwise comparisons and a super-matrix is created to determine the overall priorities obtaining the cumulative influence of every element on the other (Saaty & Vargas, 1998).

- Once the super-matrix has been formed, the weighted super-matrix can be obtained by adjusting the total of each column to equal one. The DEMATEL outcome has been utilized into the ANP approach to determine the weight of each responsibility at this stage. This study utilized Super Decision software to determine the priorities of the selected responsibilities.

4. Findings of the Study

The initial round of Delphi resulted in an extended list of 146 responsibilities to be fulfilled by responsible leaders. The participants of the study kept in view the six categories of responsibilities (i.e.; ethical, social, business, leadership, legal, and environmental) while compiling the list. This was executed without any bias, consideration or constraint limiting the extraction process. In the second iteration, participants identified five major considerations namely ‘needs of the surrounding community’, ‘grey areas where government support is non-existent/least visible’, ‘augmentation to organizational image’, ‘contribution to organizational performance’ and, ‘quantum of resources required’. Keeping the major considerations in view, the list of 146 responsibilities was trimmed to 41 items having 20 most essential and 21 most impactful responsibilities on which at least 60% of the participants agreed (Table 2). In the same (second) iteration of Delphi, the participants were asked to further reduce the number of responsibilities along with an initial prioritization. Consequently, a list of ten most significant responsibilities emerged as shown in Table 3 (necessity and impact combined; the researcher asked participants to separate ten responsibilities from the list of 41). The participants gave highest priority to the “supporting children education’, ‘capacity building for local community to earn livelihood’ and, ‘setting up of water filtration plants”. The third iteration of Delphi resulted in a set of five responsibilities, method of execution, and identification of specific activities for allocation of resources. Results of the third iteration of Delphi are presented in Table 4. The set of five responsibilities was the same as identified by the participants during second iteration (top five from the list of 10). However, the participants agreed that supporting children education and capacity building of local community for earning livelihood could be effectively undertaken in collaboration with government departments while other responsibilities could be assumed by organizational at their own (solo projects).

Table 2. Findings of Initial Round of Delphi

Ser	Category of Responsibility	Most Essential Responsibility	Most Impactful Responsibility
1.	Social Responsibility	Supporting children education Creating job opportunities Looking after religious places Emergency casualty evacuation Maintaining local parks/playing grounds Improving traffic management in the vicinity of organization	Augmenting basic health services Capacity building to earn livelihood Provision of loans for emergencies Setting up water filter plants Firefighting assistance to locals Maintenance of roads leading to the organizational premises
2.	Ethical Responsibility	Providing land for graveyards Provision of good working environment Respecting personal privacy Reduction of discrimination	Provision of food for poor Facilitation of women and disabled persons Discounts for local community Inclusion of minorities
3.	Leadership Responsibility	Equal opportunities to all Improving interaction with followers	Organizational justice Appreciating contribution of followers
4.	Business Responsibility	Ensuring customer protection Provision of relevant information Addressing customer grievances	Good return to shareholders Declaration of mistakes Improving customer care/help center
5.	Legal Responsibility	Discouraging child labor Compliance with rules Transparency in financial reporting	Meeting safety standards in operations Non-exploitative remuneration Meeting contractual obligations
6.	Environmental Responsibility	Reduction of pollution Control on noise pollution	Disposal of solid and liquid waste Tree plantation Preservation of water

Table 3. Second Iteration of Delphi – Ten Responsibilities to be Fulfilled with Priority for Allocation of Resources

Ser	Responsibilities	Priority for Fulfillment
1.	Supporting children education	Priority 1
2.	Looking after religious places	Priority 9
3.	Maintaining local parks/playing grounds and tree plantation	Priority 8
4.	Augmenting basic health services of local community	Priority 7
5.	Capacity building to earn livelihood for local community	Priority 2
6.	Setting up water filtration plants for clean drinking water	Priority 3
7.	Improving traffic flow in the vicinity of organization	Priority 10
8.	Improvement of working environment in the organization	Priority 4
9.	Provision of food for poor	Priority 6
10.	Reduction of discrimination	Priority 5

Table 4. Third Iteration of Delphi – Five Responsibilities with Method of Execution and Identification of Specific Activities for Allocation of Resources

Ser	Responsibilities	Method of Execution	Specific activities for allocation of resources
R-1	Supporting children education	Collaboration with local education department	Renovation of two government schools in nearby community and children of employees securing 85% and above marks granted financial support for education
R-2	Capacity building to earn livelihood for local community	Collaboration with vocational training department	Establishment of technical training center for local matriculates along with on-the-job training in the organization for six months every year to create a pool of reserve HR.
R-3	Setting up water filtration plants for clean drinking water	Solo project by organization	Setting up a new water filtration plant and bearing operational costs of the other three for local community
R-4	Improvement of working environment in the organization	Solo project by organization	Installation of air cleaners. Replacement of electric fittings to fire-proof fittings. Installation of water dispensers for employees.
R-5	Reduction of discrimination	Solo project by organization	Adjustment of offices of the disabled employees on the ground floor. Installation of lift and construction of ramps. Renovation of female employees' refreshment area. Gifts to minorities on their festivals.

Note: R-1 to 5 – Responsibility 1 to 5 chosen from the list of ten for fulfillment.

After extracting the major considerations (criteria), a set of five responsibilities to be focused on, and the method of their execution through the Delphi technique, the next step was DEMATEL analysis for determining the interdependence of the criteria. The interdependence of criteria was required to know the most significant criterion and the order of importance of each criterion, which were required to determine the relative weights to be assigned to each criterion (Seyed-Hosseini et al., 2006). A pairwise comparison of the criteria was carried out by participants, and the resultant direct relation matrix is shown in Table 5. The normalized relation matrix was created by dividing each row item of the direct relation matrix by the sum of each column, as shown in Table 6. Finally, the total relation matrix was generated by first subtracting the normalized relation matrix from the identity matrix, taking the inverse of the resultant matrix, and then multiplying the inverse and the normalized relation matrix (presented in Table 7). In Table 8, the sums of rows (R) and columns (D) of the total relation matrix have been shown along with R+D and R-D values. The R+D values indicate the influence of a particular criterion on other criteria. It can be observed that criterion B was the most influential, followed by A, C, and others. R-D values determined the influence status, and it can be noticed that negative values of criteria D and E made them effects, while positive values of criteria A, B, and C indicated that they were the causes.

Table 5. Initial Direct-Relation Matrix

	A	B	C	D	E
A	0	2.9	2.8	2.6	1.3
B	0.9	0	2.2	2.9	2.1
C	1.9	2.4	0	1.1	1.9
D	1.2	2.3	1.8	0	2.2
E	2.9	2.1	1.3	2.7	0

Note: A - Responsibilities expounded by the needs of the surrounding community; B - Grey areas where government support is non-existent/least visible; C - Responsibilities which can substantially augment organizational image; D - Responsibilities which can substantially contribute to organizational performance; E - Nature and quantum of resources required.

Table 6. Normalized Direct-Relation Matrix

	A	B	C	D	E
A	0	0.284	0.274	0.254	0.127
B	0.088	0	0.215	0.284	0.205
C	0.186	0.235	0	0.107	0.186
D	0.117	0.225	0.176	0	0.215
E	0.284	0.205	0.127	0.264	0

Note: A - Responsibilities expounded by the needs of the surrounding community; B - Grey areas where government support is non-existent/least visible; C - Responsibilities which can substantially augment organizational image; D - Responsibilities which can substantially contribute to organizational performance; E - Nature and quantum of resources required.

Table 7. Total Relationship Matrix

	A	B	C	D	E
A	0.946	1.199	1.095	0.800	0.872
B	0.697	1.010	0.756	0.813	0.910
C	0.729	0.781	0.901	0.649	0.850
D	0.690	0.974	0.869	0.552	0.878
E	0.689	1.156	1.018	0.761	1.036

Note: A - Responsibilities expounded by the needs of the surrounding community; B - Grey areas where government support is non-existent/least visible; C - Responsibilities which can substantially augment organizational image; D - Responsibilities which can substantially contribute to organizational performance; E - Nature and quantum of resources required.

Table 8. D+R and D-R along with Influence Status

Criteria	R	D	D+R	D-R	Influence Status
Responsibilities expounded by the needs of the surrounding community (A).	4.548	4.914	8.418	0.909	Cause
Grey areas where government support is non-existent/least visible (B).	4.188	4.641	9.036	1.210	Cause
Responsibilities which can substantially augment organizational image (C).	3.913	5.123	8.830	0.452	Cause
Responsibilities which can substantially contribute to organizational performance (D).	3.965	3.577	7.543	-0.388	Effect
Nature and quantum of resources required (E).	4.663	3.754	9.462	-0.366	Effect

Note: D – sum of column of total relation matrix, R – sum of row of total relation matrix

The third step was an analysis using the Analytical Hierarchy Network (AHN) to prioritize the responsibilities based on the already-identified criteria. This prioritization was critical to verifying the initial priorities extracted from the Delphi technique and determining the relative weights of responsibilities for resource allocation. The AHN technique has been adopted because the responsibilities to be prioritized were closely related to each other, and the fulfillment of one influenced the fulfillment of other responsibilities. For AHN analysis, a pairwise comparison matrix for the five criteria was created using the average of inputs

(as shown in Table 9) from the experts obtained on pairwise comparison questionnaires. The network framework of criteria and the selected responsibilities have been shown in Figure 2. After combining the input from experts about the criteria as well as the alternatives (the responsibilities to be fulfilled), the obtained results have been presented in the form of the super-matrix shown in Table 10.

Figure 2. Analytical Network Framework of Criteria and Responsibilities

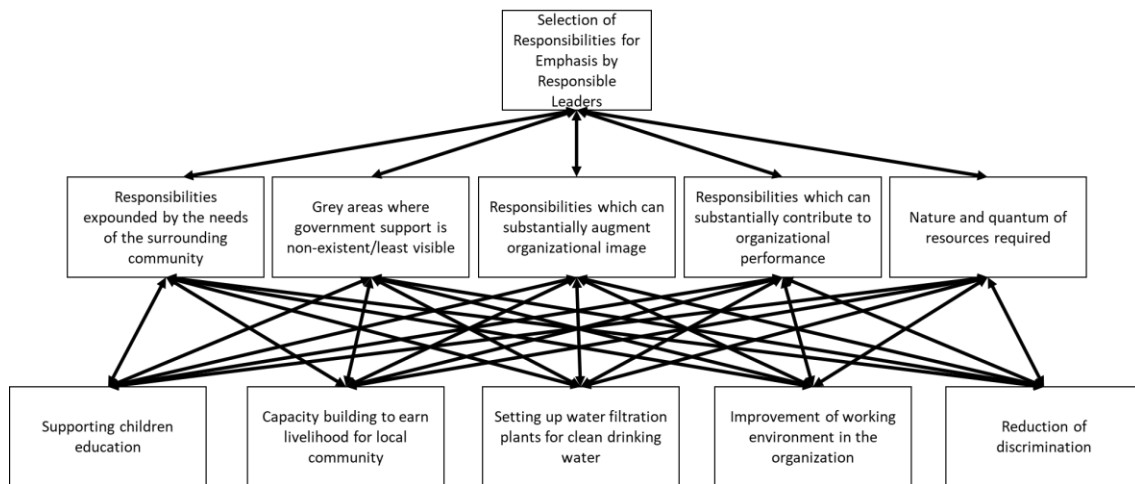


Table 9. Pairwise Comparison Matrix of the Criteria for AHN

Criteria	A	B	C	D	E
A	1	4	4	5	7
B	¼	1	3	4	4
C	¼	1/3	1	3	4
D	1/5	¼	1/3	1	4
E	1/7	¼	1/4	¼	1

Note: A - Responsibilities expounded by the needs of the surrounding community; B - Grey areas where government support is non-existent/least visible; C - Responsibilities which can substantially augment organizational image; D - Responsibilities which can substantially contribute to organizational performance; E - Nature and quantum of resources required. Consistency Ratio (CR) = 9.8% (acceptable being lesser than 10%)

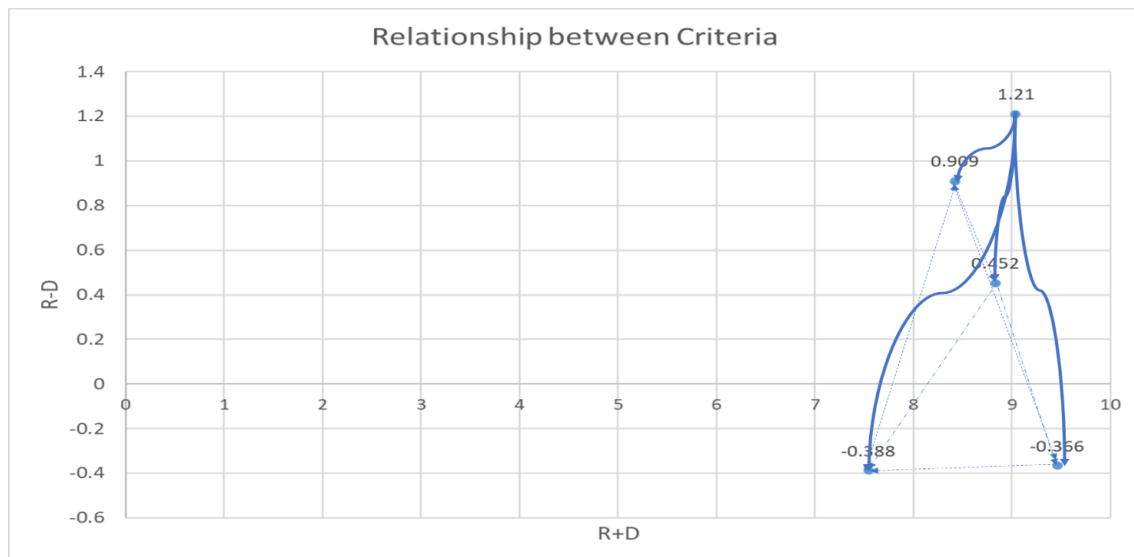
Table 10. AHN Super Matrix (Weighted)

	Goal	A	B	C	D	E	R-1	R-2	R-3	R-4	R-5
Goal	0	0	0	0	0	0	0	0	0	0	0
A	0.225	0	0	0	0	0	0	0	0	0	0
B	0.111	0	0	0	0	0	0	0	0	0	0
C	0.059	0	0	0	0	0	0	0	0	0	0
D	0.043	0	0	0	0	0	0	0	0	0	0
E	0.018	0	0	0	0	0	0	0	0	0	0
R-1	0	0.407	0.488	0.462	0.429	0.389	1	0	0	0	0
R-2	0	0.296	0.240	0.250	0.243	0.206	0	1	0	0	0
R-3	0	0.046	0.052	0.055	0.063	0.103	0	0	1	0	0
R-4	0	0.102	0.071	0.083	0.129	0.118	0	0	0	1	0
R-5	0	0.148	0.149	0.151	0.138	0.181	0	0	0	0	1

The entire methodology, in a summarized form, included Delphi for the identification of criteria and responsibilities to be focused on by responsible leaders. It was followed by the DEMATEL inquiry to determine relationships between the five chosen criteria, i.e., the creation of an initial direct-relation matrix (Table 5), a normalized direct-relation matrix (Table 6), and a total relation matrix along with D and R values (Tables 7 and 8) were generated. Then, the map of the relationship between criteria was found by mapping

the dataset of D+R and D-R (Figure 3). The criterion B (Grey areas where government support is non-existent or least visible) with the highest value of D-R was previously called the master dispatcher. The criterion E (organizational image) with the lowest value of D-R was master receiver. The results indicated that the B criterion was the major influence on other criteria. The E criterion was being affected by other criteria without much influence on others, so it was the master receiver. With the highest D+R value, criterion B (needs of the adjacent community) had the strongest relationships to the others. In the same way, criterion B was adhered to in relation to the value of D+R, followed by A, C, D, and E.

Figure 3. Map of Relationship of Criteria



Based on the ANP results, the priorities of the responsibilities to be focused on emerged, as shown in Table 11. The top priority was found to be supporting children's education (weighted at 0.435), followed by capacity building to earn a livelihood for the local community (weighted at 0.247), and then reducing discrimination in the organization (weighted at 0.154). The fourth priority was to improve the working environment in the organization (weighted at 0.100), while the last priority was to set up a water filtration plant to provide clean drinking water for the local community (weighted at 0.063). This priority was slightly different from the results obtained from the third iteration of Delphi and would be discussed in the discussion section.

Table 11. Prioritization of the Chosen Responsibilities to be focused by Responsible Leaders

Code	Responsibilities	Priority for Responsible Leaders	Weightage
R-1	Supporting children education	Priority-1	0.435
R-2	Capacity building to earn livelihood for local community	Priority-2	0.247
R-3	Setting up water filtration plants for clean drinking water	Priority-5	0.064
R-4	Improvement of working environment in the organization	Priority-4	0.100
R-5	Reduction of discrimination	Priority-3	0.154

5. Discussion on Findings

The selection of certain responsibilities for greater emphasis by responsible leaders does not imply neglecting other unselected responsibilities. Responsible leaders must address all relevant responsibilities to maintain their image and the reputation of their organizations (Haque et al., 2019). This study proposes the selection of organizational and leadership responsibilities that require more attention under specific social, economic, legal, ethical, environmental, and business conditions. Changes in these conditions and situational

determinants necessitate re-evaluation and re-assessment, which may result in a different set of responsibilities for leaders to prioritize (Schinzel, 2019). It is important to note that these conditions may vary with changes in location, culture, and socio-economic variables (Muff et al., 2022). For example, the responsibilities identified in this study are particularly relevant for an organization located in a developing country with stable socio-economic conditions. Within the same country, an organization in a large city (population over 1.5 million; OECD, 2022), a small city (population up to 0.2 million), or in remote areas with challenging terrain and weather conditions may have different sets of responsibilities for leaders to focus on. The extent of change in responsibilities can range from negligible to significant, depending on the magnitude of the changes in conditions.

In this study, the first step involved using the Delphi technique to identify five major considerations or criteria and a list of responsibilities for organizational leaders within the social, ethical, leadership, business, legal, and environmental domains (Irfan et al., 2020). The initial iteration resulted in a list of 146 responsibilities. In the second iteration of the Delphi process, the criteria were refined to narrow down the responsibilities to 41 items, which were then categorized into two broad groups: essential and impactful responsibilities. The essential responsibilities, dictated by the needs of the local community and the overall long-term welfare deficiencies of the population, comprised 20 items. Conversely, the impactful responsibilities, expected to have short-term noticeable effects and earn immediate goodwill and reputational benefits for the organization, comprised 21 items. To ensure a focus beyond routine responsiveness and to provide greater emphasis, the number of responsibilities (41) was further reduced to allow better concentration on the selected responsibilities.

Consequently, the categories of essential and impactful were abolished to streamline the selection process, focusing on responsibilities that were both essential and impactful, having both short-term noticeable and long-term effects. From the initial list of 41 responsibilities, 10 major responsibilities were selected. The third iteration aimed to further reduce this set to 5 major responsibilities, along with an initial subjective assessment of the priorities assigned to each responsibility. For small organizations (fewer than 1000 employees), it is proposed to end the process at this stage. At this point, five major responsibilities have been identified, and small organizations can subjectively allocate resources based on these results without further statistical analysis. The decision to terminate the methodology or proceed with further DEMATEL and ANP analysis is at the discretion of organizational leaders. However, for medium and large organizations, as well as multinational corporations (MNCs) with broader operations and larger resources, the subsequent steps of DEMATEL and ANP analysis are recommended to support decision-making. These additional steps provide a more robust framework for prioritizing responsibilities and resource allocation.

The second step for medium and large organizations involved conducting DEMATEL analysis to determine the influence of each criterion on the remaining criteria. The results (shown in Table 8) revealed that criterion B (Grey areas where government support is non-existent/least visible) had the strongest influence on other criteria. This was followed by criterion A (Responsibilities expounded by the needs of the surrounding community) and criterion C (Responsibilities that can substantially augment organizational image). The findings from DEMATEL indicated that judgments based on criterion A would significantly affect assessments made on other criteria, as indicated by the D-R Value (master influencer). Conversely, the least influential criterion would be impacted by all other criteria but would not affect them in return (master receiver). This elucidated that the criterion with the highest influence-status should be given higher weightage in the prioritization of alternatives.

The third step involved the Analytical Network Process (ANP) and utilized the results from DEMATEL (weightage of criteria). The five responsibilities identified in step 1 were prioritized based on the analysis of responses from respondents. The super-matrix is shown in Table 10. The results indicated the order of priority for each responsibility along with weightage, incorporating the DEMATEL results, as presented in Table 11. It is important to note that the ANP results showed different weightage values, necessitating a careful consideration of each responsibility concerning resource allocation. Accordingly, priority-1 responsibility (Supporting children's education) was allocated 43.5% of the resources; priority-2 (Capacity building for local community livelihood) received 24.7%; priority-3 (Reduction of discrimination) was

allocated 15.4%; priority-4 (Improvement of the working environment in the organization) was given 10%; and priority-5 (Setting up water filtration plants for clean drinking water) received 6.4% of the available resources.

A number of studies have utilized the Delphi technique, DEMATEL, and ANP individually as well as in mutual combinations to prioritize the desired criteria and/or outcomes. For instance, Khalilzadeh et al. (2021) employed a combination of DEMATEL and ANP for risk identification and assessment in oil and gas projects. Wang et al. (2023) combined the Delphi technique and DEMATEL to explore leadership competencies in the financial industry. Similarly, Ghag et al. (2023) used ANP and the Delphi technique together to analyze sustainable international competitiveness factors of SMEs. Sarmadia and Aghababaei (2023) applied all three methods in tandem to prioritize components of disaster resilient systems for urban areas.

It is proposed that responsible leaders may use their professional judgment to slightly alter the allocation of resources while remaining aligned with the ANP results. Some studies suggest that resource allocation may be done by breaking down the alternatives into different activities (Tsai & Hsu, 2008; Wong et al., 2021). This approach can be adopted; however, it remains at the discretion of organizational leaders whether to break down alternatives into a large number of small activities or a small number of major activities. A large number of small activities provides better control but increases the attentional load for leaders. Conversely, a small number of major activities simplifies supervision with less involvement from leaders, allowing for decentralized control through management by objective (Chiu et al., Tsai et al., 2009; 2006; Tzeng et al., 2007).

Certain scholars propose the integration of activity-based costing (ABC) and resource allocation in conjunction with Zero-One Goal Programming (ZOGP) (Wong et al., 2021; Tsai & Hsu, 2008). These steps may be included optionally if resources are to be distributed among a large number of alternatives (responsibilities) or if the resources are substantially large. Such additional steps increase the complexity of the assessment and evaluation process, and organizational leaders often avoid them due to the complications of statistical procedures (Bhatti et al., 2023; Zhao et al., 2023). Even after adopting the most complex methodology of analysis, the discretion of organizational leaders remains paramount due to their professional judgment and experience. Therefore, the weightage for the allocation of resources obtained through ANP in step 3 should be taken as a broad guideline. Organizational leaders may modify it in accordance with their own professional judgment and any other intangible factors. Additional steps like ZOGP and ABC to precisely determine the allocation of resources within resource constraints should be used only when necessary (Wong et al., 2021).

The literature appears to lack comprehensiveness in determining and prioritizing the responsibilities to be focused on by responsible leaders (Mousa & Arslan, 2023). However, a few studies have endeavored to explore the role of leaders in CSR and responsible governance practices (Wang et al., 2024). Other studies have tried to focus on individual responsibilities without creating holistic guidelines for leaders, such as organizational ethical culture, pro-environmental behaviors, corporate sustainability, and improvement of the work environment (Akhtar et al., 2023; Lim, 2023; Reineholm, Ståhl & Lundqvist, 2023). Regarding the prioritization of responsibilities, scholars seem to draw inspiration from the United Nations Sustainable Development Goals (SDGs) without relating them to country-specific variables (Singhal, 2023). ESG scores and criteria have also been used in the literature to determine and prioritize the responsibilities that should be fulfilled by responsible leaders (Angtud et al., 2023; Li et al., 2023). Findings of this study seem to align with previous research with regard to the identified criteria of prioritization and its weightages. For instance, study by Wang et al. (2024) emphasized community needs and availability of resources as criteria for selection of responsibilities for focus. Similarly, Sun et al. (2024) were of the view that projects and responsibilities may be selected based on their significance for the organizational performance and image. With regard to responsibilities, Bhatti and Irfan (2024) identified the six obligation domains of responsible leadership, however, specific responsibilities were neither explored nor prioritized.

5.1. Limitations of the Present Study

The research was conducted within a cluster of organizations located in a medium-sized city in Pakistan. The results might vary with changes in geographical location, remoteness of the area (being away from the city center), organizational size, and cultural variables. This limitation was considered acceptable because the study aimed to propose a simple, viable, parsimonious, and realistic method for identifying and prioritizing responsibilities for responsible leaders. A diverse group of individuals compiled the list of responsibilities through boundary scanning. The segregation process then reduced the number to a smaller set of essential and impactful responsibilities. The context and environmental factors created a strong relevance between the organization and the responsibilities chosen by respondents from the same context/environment. The study aimed to present a generalized process for extracting, verifying, and prioritizing responsibilities, providing broad guidelines for resource allocation. Specific complexities and minor details unique to individual organizations were avoided, which could be addressed using the results obtained through the generalized process proposed by this study.

The criteria were limited to five factors to make the proposed process easy to understand and implement. However, the process can accommodate any number of criteria for prioritizing responsibilities if deemed appropriate. Similarly, the number of chosen responsibilities was limited to five, but organizational leaders can adjust this to include any number of responsibilities they consider necessary. This study proposed using the Delphi technique to extract relevant responsibilities and then reduce them to a manageable number. However, other methods such as in-depth interviews, Benefits-Costs-Opportunities-Risks (BOCR) analysis, or a review of local relevant literature could also be employed. The Delphi technique was adopted in this study because it was considered effective for extracting results that are closer to reality, with input from respondents familiar with the cultural and business context of the organization.

5.2. Contributions of the Study

This study is expected to contribute to the literature on management, leadership, social responsibility, and decision-making. The current literature lacks tools to assist leaders in defining their priorities concerning important social and organizational responsibilities. This study has endeavored to simplify and suggest a methodology for determining and prioritizing the avenues for social and business contributions by an organization. The proposed methodology is designed to be flexible, suitable for organizations of all sizes. Additionally, the methodology can be adapted at each step to accommodate different leadership styles and socio-economic variables.

The study proposes a simple sequence of connected activities that culminate in viable options for organizational leaders at all levels of hierarchy for the selection, prioritization, and alteration of the direction of their efforts. Practitioners using the suggested methodology can keep each step as simple as basing the outcome on the input from one individual. Conversely, input from larger panels of experts can add diversity and reliability to the outcomes, allowing leaders to decide on the number of respondents according to their convenience. The findings of this study are considered beneficial for society, as the proposed methodology is likely to delineate welfare-deficient spheres of community life as focal points for responsible leaders. Organizational resources, in light of this study, will be automatically diverted to the most desired activities, enhancing the betterment of all stakeholders.

5.3. Theoretical Implications

This study addresses the ongoing debate on boundary analysis of the business environment for the selection and prioritization of the most essential and impactful responsibilities to be fulfilled by responsible leadership. The responsibilities prioritized by responsible leaders need to emerge from community needs and should be delinked from conventional corporate social responsibilities (Wong et al., 2023; Bhatti et al., 2023). Simply generating new ideas or initiating technological advancements appears inadequate for attaining societal and organizational objectives. The major theoretical implication of the proposed methodology is determining the intersection between areas of social deprivation and the willingness of the

organization to help. It is proposed that each organization must contribute to the identified responsibilities to the best of its ability, regardless of the quantum of resources required to achieve the objectives perfectly.

This study is likely to provide flexible and comprehensive guidelines to organizational leaders for making significant contributions to surrounding communities and organizational performance. The five major considerations (criteria) identified by this study are likely to be applicable in various situations and scenarios. However, any addition or deletion of criteria remains at the discretion of organizational leaders, depending on the circumstances. Similarly, the set of five responsibilities is expected to be applicable to most organizations in South Asia. It is imperative to comprehend and acknowledge that companies ought to prioritize fortifying their future standing over maximizing short-term profits. Organizations should prioritize developing mission statements, goals, and strategies that benefit their surrounding communities and enhance the overall organizational climate (Zhao & Zhou, 2019).

Responsible leaders should prioritize human resource development and view it as a crucial aspect of social responsibility (Sun et al., 2024). Responsible leaders often promote the importance of employees prioritizing community well-being. Typically, companies tend to focus on economic and environmental aspects, often overlooking the social component. The findings of this study align with previous research emphasizing the importance for firms to consider community interests and human development (Baumgartner & Ebner, 2010; Galpin et al., 2015). The proposed methodology implies that responsible leaders need to address the roots of public welfare and contribute whatever can be conveniently managed by business organizations. Awaiting the availability of substantial resources or inhibiting small contributions due to the fear of inability to make the desired change is negated by this study.

5.4. Implications for Management

This study has important implications for leadership who desire to enhance their organization's image and contribute to the well-being of the community. Leaders should consider reevaluating the current culture in order to align with the responsibilities outlined in the current research. Organizational leaders can create instructional communications that can be incorporated into training programs using multimedia content, distance learning, and regular communication between managers and workers. The way employees learn and behave is greatly influenced by their communicative strategies and preferences, in accordance with their identified responsibilities. Effective implementation of prioritized responsibilities by leaders and managers requires a strong focus on empowering employees in sustainability initiatives. Creating adaptable organizations is essential, and it is crucial to incorporate the specified criteria into all organizational procedures.

Likewise, the study can be beneficial in defining the criteria as well as the focus of leaders with regard to fulfilling responsibilities toward stakeholders. A leader can rely on his or her own judgment in defining the criteria and responsibilities and distributing the available resources based on the subjective assessment. For greater reliability of the defined criteria and responsibilities, a group of diverse individuals can be asked to make judgments to reach a rational allocation of resources. Alternatively, the subjective assessments can be quantified for prioritization using the DEMATEL and ANP techniques, as suggested by this study. Finally, if the resources are vast and multiple constraints have to be applied, statistical techniques like ABC and ZOGP may be used for the allocation of resources. However, the responsible leader's discretion remains prime in deciding the criteria and the set of responsibilities to be adopted by an organization for the focus and utilization of resources. The study also recommends that executives and directors should update their mission statements to reflect their highest-ranking responsibilities, enabling them to effectively translate their concepts into strategies, values, and objectives. Responsible leaders must strive for equilibrium by elevating social perspectives and focusing on the fundamental needs of the communities in their vicinity.

5.5. Direction for Future Research

This study has suggested a simplified methodology to suit the main requirements of leaders who want to realign their organizations with the social and business environment around them. The findings were

primarily based on assessments by a diverse panel of 40 individuals using three iterations of the Delphi technique, DEMATEL, and ANP. Replication of the study is suggested by researchers to validate and refine the suggested methodology. Similarly, we need to evaluate the five criteria for selection and prioritization of responsibilities identified by this study in different socio-economic and cultural contexts. In addition, the set of five responsibilities is also required to be analyzed for their linkage with geographical and demographic variables. This study recommends that the proposed methodology be kept free from complicated statistical techniques for ease of application by organizational leaders. However, the use of suitable statistical techniques to obtain the desired guidelines for the allocation of resources may be done at the discretion of organizational leaders.

6. Conclusion

In order to fulfill its responsibilities towards diverse stakeholders, responsible leadership must prioritize certain responsibilities and allocate additional resources accordingly. Using the Delphi technique, coupled with DEMATEL and ANP, this study has identified five criteria for the selection and prioritization of relevant responsibilities. The identified criteria include responsibilities based on the needs of the surrounding community, gray areas where government support is minimal or non-existent, responsibilities that can substantially enhance the organizational image, responsibilities that can significantly contribute to organizational performance, and the quantum of resources required.

The five responsibilities, in order of priority, are: supporting children's education (43.5% of resources), capacity building for the local community's livelihood (24.7%), reduction of discrimination (15.4%), improvement of the working environment within the organization (10.4%), and setting up water filtration plants for clean drinking water (6%). The percentages indicate the quantum of resources allocated to each selected responsibility. The identified criteria, selected responsibilities, priority, and percentage of available resources allocated reflect the socio-economic and cultural context of a medium-sized city in Pakistan, which may vary in other contexts.

It is expected that the methodology proposed by this study will enable responsible leaders to select and prioritize optimal responsibilities relevant to the social and business environments of their organizations. We also expect the methodology to provide sufficient guidelines for the rational allocation of resources to fulfill prioritized responsibilities. We encourage future researchers to validate the proposed methodology and the findings of this study in different contexts.

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