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The Evaluation of Experience of Grief in a Critical Care Units using the DEMATEL Method

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Abstract: Experiencing grief in a Critical Care Unit (CCU) is a profoundly emotional and challenging journey for both patients and their families. The environment, characterized by the urgent and often life-threatening nature of illnesses or injuries, creates a palpable atmosphere of tension and anxiety. Families grapple with a profound sense of uncertainty, their hopes and fears intertwining with each passing moment. In this high-stress setting, decision-making becomes an arduous task. Balancing the desire for recovery with the potential for suffering requires navigating a complex emotional landscape. Communication with healthcare providers takes on paramount importance, as families lean on them for guidance, understanding, and hope. Support systems play a crucial role in sustaining families through this ordeal. Some turn to their faith, seeking strength in the embrace of spiritual beliefs. Others draw on the collective strength of family and friends, finding comfort in shared moments of vulnerability. The DEMATEL system, when applied to strategic criteria, aims to capture the collective knowledge regarding causal relationships. This model utilizes matrices or digraphs to represent intricate causal connections, providing a visual representation of the underlying structure. It proves highly practical and valuable, particularly for gaining insights into any given strategy. Connectivity Level (1-5), Data Transmission Rate (Mbps), Latency (ms), Reliability Score (1-10) and Energy Efficiency (KWh/100 miles). the Rank using the DEMATEL for Experience of Grief in a Critical Care Units. Connectivity Level (1-5) is got the first rank whereas is the Data Transmission Rate (Mbps) is having the Lowest rank.

Keywords: MCDM, Connectivity Level (1-5), Data Transmission Rate (Mbps), Latency (ms), Reliability Score (110) and Energy Efficiency (KWh/100 miles).

1. INTRODUCTION

Critical care plays a pivotal role in facilitating patient recovery and ensuring their survival. Technological advancements and the ability to prolong the effectiveness of medications have the potential to significantly enhance the chances of patients enduring through critical situations. However, despite the utilization of cutting-edge technologies and the provision of intensive medical and nursing care, the mortality rate for seriously ill adults in intensive care units (ICUs) remains notable. It ranges from approximately 19.1% to 21.8%, according to ICNARC in 2008. Caring for patients with intricate needs can lead to both emotional and physical strain, as highlighted by Manahan et al. in 2006 [1]. This care-giving responsibility can have a notable impact on the emotional well-being of healthcare providers, potentially resulting in both emotional and cognitive effects, as noted by Reshot et al. in 1997. Until now, much of the research in this area has concentrated on end-of-life scenarios, as reflected in the conclusions drawn by researchers such as Pattison in 2006 and McMillan in 2008, specifically regarding the withdrawal of treatment, as discussed by Holcomb et al. in 2004 and Hove et al. in 2007 [2]. Additionally, studies have delved into the effects of a patient's demise on their family members within the intensive care unit (ICU), as investigated by Holden et al. in 2002. Fox all et al. in 1990 emphasized that death is a topic that nurses frequently grapple with. Statistics pertaining to stress levels among healthcare professionals indicate a statistically significant impact, particularly for those who routinely encounter death in their work environment, often within ICUs and hospitals. However, the precise nature of this stress and the specific experiences of intense distress have not been thoroughly explored or documented [3]. The potential for professional stigma exists because nurses may avoid expressing regret, as outlined by Wiesel in 2014. When occupational stigma arises, nurses might grapple with the grief experienced by patients and their families, yet they often refrain from acknowledging their own sorrow or the distress of their colleagues, as observed by Toga in 1987. Many nurses choose not to divulge their grief, opting instead to keep their emotions to themselves or

downplay them, as noted by Keri et al. in 2010. However, if nurses' struggles are disregarded or left unaddressed, it can lead to fatigue, heightened overall stress levels, and a sense of inadequate coping, as indicated by Zero et al. in 2010 [4]. Numerous surveys have been conducted across different locations, religions, and nations to delve into the experiences of nurses caring for patients who have passed away in the ICU. These studies, including those by Adan in 2014, Conde in 2014, de Swart and Gauche in 2017, Shimoinaba et al. in 2014, and Wilson in 2014, largely revolved around end-of-life care and did not focus specifically on grief. However, the encounter with grief is an integral part of caring for dying patients for all nurses, as emphasized in a study by de Sward and Touché in 2017 [5]. In South Africa, ICU nurses who have conducted autopsies have identified three central themes: the emotional challenge of caring for deceased bodies, the necessity of detachment, and thanatophobia, which encompasses the fear of death or dying. In this study, participants found it professionally challenging to emotionally distance themselves from a deceased patient, facing the reality of their own mortality. In Islamic culture, the acceptance of death is rooted in the belief that all individuals ultimately belong to God and will return to Him. Consequently, when Muslims face death, the sense of loss is heightened, making it difficult to openly express and grieve [6]. Traditional expressions of grief, such as crying, may not be readily acknowledged, as discussed by Sohaila et al. in 2011. These cultural norms can significantly influence how Muslim nurses respond to the passing of patients. In the paediatric intensive care setting, nurses establish deep, meaningful, and therapeutic connections with their young patients and their families. Despite the recurrent and sometimes abrupt transitions between various cases, as well as the frequent encounters with loss, these nurses are committed to fostering enduring bonds [7]. Effectively processing their grief is crucial for these nurses. Failure to do so can potentially lead to heightened stress levels and challenges in managing future crises. Moreover, it may negatively impact their self-esteem. The quality of care provided to patients and their families, as well as the dynamics among colleagues, can be influenced by how nurses handle death and dying. The existing research literature predominantly touches on the implications of patient and family experiences in terms of survival rates. However, it also underscores that nursing staff, particularly those in intensive care settings, are significantly affected by these circumstances [8]. The patient's age was determined by examining their medical records. The records included information about the diagnosis, potential medical assistance, and the methodical approach to end-of-life care. Additionally, demographic details such as gender, occupation, years of practice including roles in patient care were collected from the participants during interviews. These interviews, which focused on parents who had experienced the loss of a child, were conducted by a researcher (C.Y.D.) who had no prior relationship with the participants. The interviews were guided by a semi-structured questionnaire developed by the researchers [9]. Each interview session lasted between 20 to 40 minutes, and they were all recorded. Professional transcription services were used to transcribe the interviews from the audiotapes. These transcriptions were cross-verified with the interviewer's field notes, which included observations of any emotional reactions, body language, and the interview environment. Additional notes were incorporated as necessary to ensure a comprehensive record of the interviews [10]. Providing support for a participant Inert yet sustained discussed as, "He likely You could say perhaps because he perfectly fits the role he passed away during the night distinct and for each They had a sense that I believe so a certain scent of decay dissolves." assistance Emotional withdrawal is the challenge. Participants are aware Even with the knowledge of mortality It can transpire regardless. A physician remarked, "Throughout In conjunction with medical education and practice Three decades of my life Always striving to preserve lives Everything you can do It's always about taking action This reflex, nearly a sense of alarm Similar to... I believe it's Essentially a feeling of inadequacy [11]. " Another participant acknowledges receiving technical assistance again A general hesitance to accept Regarding, "These youngsters on board Someone is anticipating them Stamping a ticket, no one will. Only one child remains in the PICU an exit route Sneak away. Specialized areas within nursing practice motivated by empathy this extends to the patients and their connections with families attending to patients in their final moments is driven by emotional investment. Resulting in the passing of the patient expressions of mourning or sadness nurses encountering terminal illness not only for those in clinical roles, like palliative care, where death is anticipated or frequent [12]. Currently, there are nurses restricted in investigating distressing incidents empirical inquiry into patient mortality then, within the acute care settings they oversee. when paediatric nurses confront the loss of a patient, they react to patient demise a pattern has been identified in connection to external variables (Papado, 2009). these encompass aspects like prior close brushes with death, personal hardship, Professional nursing Ethics and the work environment are all Factors contributing to the distress a nurse may exhibit (Papado, 2009) [13]. The influence of these external factors on grief responses Also has implications for support systems in other research involving working nurses With diagnosed, end-of-life care or Life closure for elderly patients While upholding dignity in their final moments. This study delves into the experience of the end of life within the ICU, as well as the broader hospital setting, encompassing both the environment and the process of coping with bereavement and death. It recognizes the interconnectedness of these aspects, which have been somewhat isolated in sociological research [14]. The primary aim of this investigation is to bridge the gap between the two bodies of literature, focusing on the emotional distress experienced by families following the loss of a loved one in the hospital at the end of life. It examines how families navigate the grieving process, from admission to the hospital through the months following the loss. This article

poses two key questions: a) How do family members construct narratives of tragedy surrounding the hospital experience at the end of life? and b) What holds significance for a grieving family after the passing of a loved one following hospitalization and during their separation [15]. The research also underscores the importance of advance care planning, emphasizing it as a social process, mostly characterized by informal conversations about end-of-life decisions. It delves into the dynamics of discussions that occur in the presence of families, shaping their experiences and influencing communication around condolences. A causal analysis is provided, examining the various factors influencing family members' decisions regarding end-of-life care options and the subsequent impacts of grief on separated family members. The study also scrutinizes the processes involved in navigating the death of a loved one, including pre-life care and the narratives and meanings that emerge from these conversations, which are then reflected in the grieving process (Chase, 2005) [16].

2. MATERIALS AND METHOD

Connectivity Level (1-5): This parameter indicates the degree to which a vehicle can connect and communicate within the Internet of Vehicles network. A higher score (closer to 5) suggests better connectivity.

Data Transmission Rate (Mbps): This measures the speed at which data can be sent or received by the vehicle in megabits per second. A higher Mbps indicates faster data transmission.

latency (Ms): Latency refers to the time it takes for data to travel from the sender to the receiver in milliseconds. Lower latency values imply quicker response times.

Reliability Score (1-10): This score reflects how dependable the vehicle's connectivity and data transmission are. A higher score indicates greater reliability.

Energy Efficiency (KWh/100 miles): This parameter measures the amount of energy consumed by the vehicle for every 100 miles travelled, expressed in kilowatt-hours. Lower values indicate better energy efficiency.

Method: The DEMATEL system, when applied to strategic criteria, aims to capture the collective knowledge regarding causal relationships. This model utilizes matrices or digraphs to represent intricate causal connections, providing a visual representation of the underlying structure [17]. It proves highly practical and valuable, particularly for gaining insights into any given strategy. During the map creation process, there is flexibility in assigning relationships between objectives [18]. This flexibility reduces ambiguity. In the context of expert opinions, DEMATEL serves as a valuable tool for extracting knowledge and subsequently refining it. However, it should be noted that DEMATEL may pose challenges in handling subjective judgments due to its inherent complexity and potential for vagueness. DEMATEL is a straight forward technique employed for scrutinizing relationships, both direct and indirect, between system components [19]. It evaluates the degree of influence, which varies based on the nature of the relationship (Fontal and Gabs, 1976; Gabs et al., Fontal, 1973). This method, known as DEMATEL, serves as an effective instrument for assessing the significance of components. It has been recognized as a valuable tool for various applications (Saniyah et al., 2015). Its scope encompasses crucial aspects like identification, which finds relevance in diverse fields (Wu, 2012; Bai and Serkis, 2013), distribution and supply chain management (Mangle et al., 2016), as well as failure mode and effects analysis (FMEA) (Liu and Deng, 2019; Gao and Deng, 2019; Chai et al., 2017) [20]. Marketing tactics, regulating mechanisms, Safety concerns, advancement in decision-making scenarios such as Testing and Evaluation Laboratory (DEMATEL) has been applied. by global managers Proficiencies and group decision-making capabilities. This is coupled with Analytical Network Process (ANP), Multiple Criteria Decision Making (MCDM), Fuzzy set theory, and the like. This customary practice Revives established techniques and introduces fresh ones Pioneers blended methodologies applications [21]. of elements within A DEMATEL simulates the repercussions Initial direct interaction matrix system comprising of elements Consequences for other elements may traverse intermediate stages, this marks the inaugural direct interaction by elevating the matrix is formulated. for those in authority. Comprehensive influence Derived from all potentialities Matrices are aggregated and computed matrix to the power of infinity Elevate to zero Presuming that alterations will transpire [22]. The DEMATEL methodology and its extensions are employed to address practical, real-world challenges. This review encompassed 346 academic papers, scrutinizing them based on title, abstract, and full-text screening. The study focused on both the applications of DEMATEL and its variations, without any limitations on access [23]. Research that solely adapts the technique for specific real-world systems was excluded. For readers interested in further details, additional references can be found in citations. Finally, a comprehensive evaluation of documents found in full was conducted, considering aspects such as focus, methodology, application, and additional methods used [24]. The articles were categorized based on various criteria, including Year of Publication, Application Domains, and Extracted Quotations. Regarding the adopted DEMATEL methods, a selection process was carried out, resulting in approximately five main categories: Classical DEMATEL (105 Articles), Lesser-known versions utilizing DEMATEL (63 articles), Application of Grey DEMATEL (12 articles), Analysis incorporating both

Analytical Network Process (ANP) and DEMATEL (154 articles), and other DEMATEL methodologies (12 articles). The classification scheme is presented [25].

3. ANALYSIS AND DISCUSSION

TABLE 1. Experience of Grief in a Critical Care Units

	Connectivity Level (1-5)	Data Transmission Rate (Mbps)	Latency (Ms)	Reliability Score (1-10)	Energy Efficiency (KWh/100 miles)	Sum
Connectivity Level (1-5)	0	1	4	2	2	9
Data Transmission Rate (Mbps)	3	0	2	1	1	7
Latency (ms)	2	1	0	3	2	8
Reliability Score (1-10)	2	3	2	0	2	9
Energy Efficiency (KWh/100 miles)	2	1	1	2	0	6

Table 1 shows that DEMATEL Decision making trail and evaluation laboratory in Experience of Grief in a Critical Care Units with respect to Connectivity Level (1-5), Data Transmission Rate (Mbps), Latency (ms), Reliability Score (1-10) and Energy Efficiency (KWh/100 miles) it is also sum of Value.

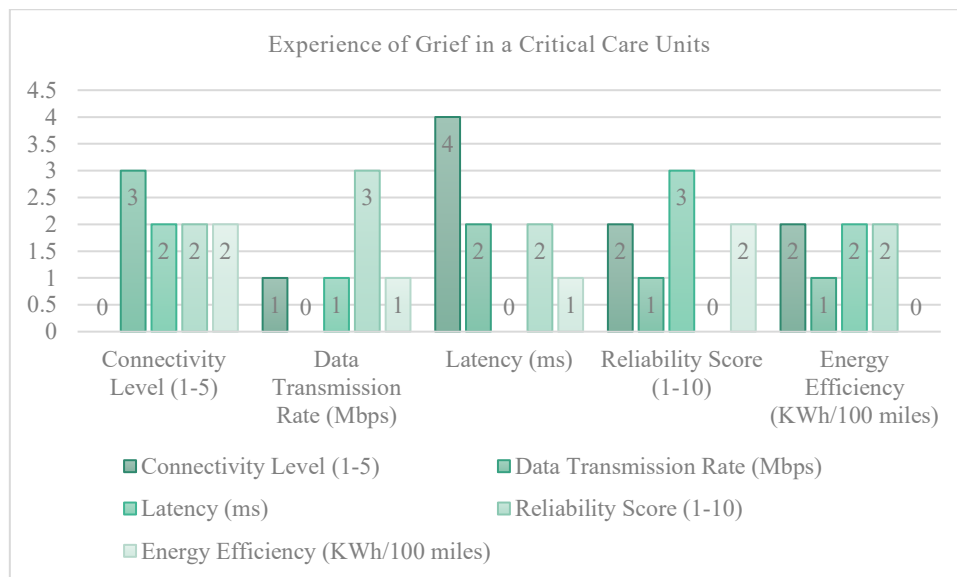


FIGURE 1. Experience of Grief in a Critical Care Units

Figure 1 shows that DEMATEL Decision making trail and evaluation laboratory in Experience of Grief in a Critical Care Units with respect to Connectivity Level (1-5), Data Transmission Rate (Mbps), Latency (ms), Reliability Score (1-10) and Energy Efficiency (KWh/100 miles) it is also sum of Value.

TABLE 2. Normalization of Direct Relation Matrix

Normalisation of direct relation matrix					
	Connectivity Level (1-5)	Data Transmission Rate (Mbps)	Latency (ms)	Reliability Score (1-10)	Energy Efficiency (KWh/100 miles)
Connectivity Level (1-5)	0	0.11111111	0.44444444	0.22222222	0.22222222
Data Transmission Rate (Mbps)	0.33333333	0	0.22222222	0.11111111	0.11111111
Latency (Ms)	0.22222222	0.11111111	0	0.33333333	0.22222222
Reliability Score (1-10)	0.22222222	0.33333333	0.22222222	0	0.22222222
Energy Efficiency (KWh/100 miles)	0.22222222	0.11111111	0.11111111	0.22222222	0

Table 2 shows that the Normalising of direct relation matrix in Connectivity Level (1-5), Data Transmission Rate (Mbps), Latency (Ms), Reliability Score (1-10) and Energy Efficiency (KWh/100 miles) The diagonal value of all the data set is zero.

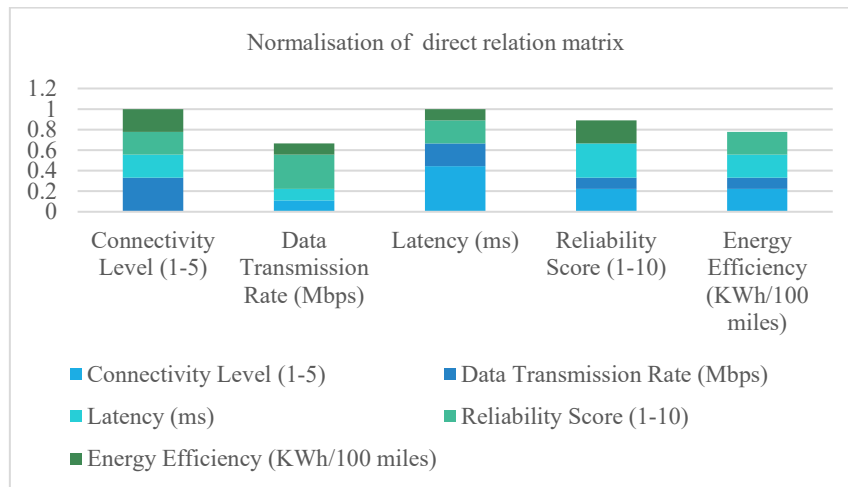


FIGURE 2. Normalisation of Direct Relation Matrix

Figure 2 shows that the Normalising of direct relation matrix in Connectivity Level (1-5), Data Transmission Rate (Mbps), Latency (Ms), Reliability Score (1-10) and Energy Efficiency (KWh/100 miles) The diagonal value of all the data set is zero.

TABLE 3. Calculate the Total Relation Matrix

Calculate the total relation matrix					
	Connectivity Level (1-5)	Data Transmission Rate (Mbps)	Latency (ms)	Reliability Score (1-10)	Energy Efficiency (KWh/100 miles)
Connectivity Level (1-5)	0	0.11111	0.444444444	0.222222	0.222222
Data Transmission Rate (Mbps)	0.3333333	0	0.22222222	0.111111	0.111111
Latency (ms)	0.2222222	0.11111	0	0.333333	0.222222
Reliability Score (1-10)	0.2222222	0.33333	0.22222222	0	0.222222
Energy Efficiency (KWh/100 miles)	0.2222222	0.11111	0.11111111	0.222222	0

Table 3 Shows the Calculate the total relation matrix in Experience of Grief in a Critical Care Units Connectivity Level (1-5), Data Transmission Rate (Mbps), Latency (Ms), Reliability Score (1-10) and Energy Efficiency (KWh/100 miles) is Calculate the Value.

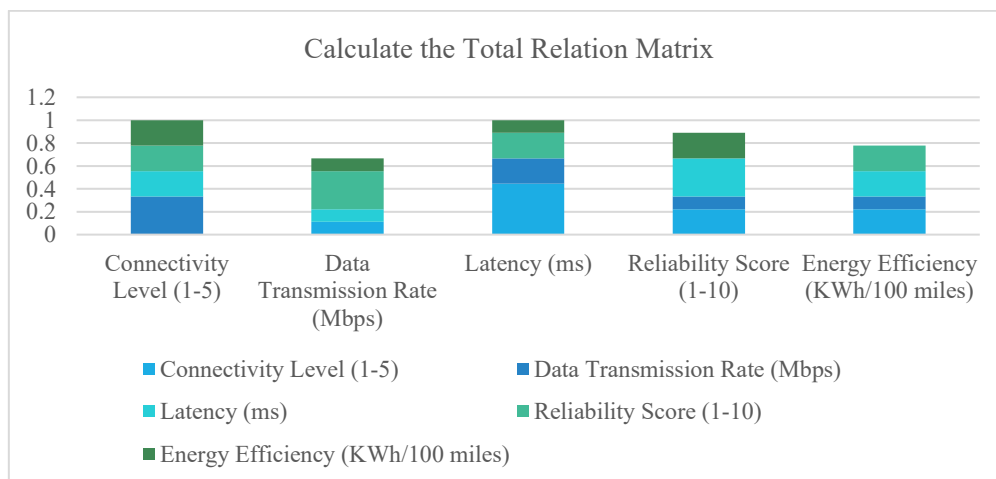


FIGURE 3. Calculate the Total Relation Matrix

Figure 3 Shows the Calculate the total relation matrix in Experience of Grief in a Critical Care Units Connectivity Level (1-5), Data Transmission Rate (Mbps), Latency (Ms), Reliability Score (1-10) and Energy Efficiency (KWh/100 miles) is Calculate the Value.

TABLE 4. $T = Y(I-Y)^{-1}$, I= Identity matrix

1	0	0	0	0
0	1	0	0	0
0	0	1	0	0
0	0	0	1	0
0	0	0	0	1

Table 4 Shows the $T = Y(I-Y)^{-1}$, I= Identity matrix in Experience of Grief in a Critical Care Units Connectivity Level (1-5), Data Transmission Rate (Mbps), Latency (ms), Reliability Score (1-10) and Energy Efficiency (KWh/100 miles) is the common Value.

TABLE 5. Y Value

0	0.111111	0.444444	0.222222	0.222222
0.333333	0	0.222222	0.111111	0.111111
0.222222	0.111111	0	0.333333	0.222222
0.222222	0.333333	0.222222	0	0.222222
0.222222	0.111111	0.111111	0.222222	0

Table 5 Shows the Y Value in Experience of Grief in a Critical Care Units Connectivity Level (1-5), Data Transmission Rate (Mbps), Latency (Ms), Reliability Score (1-10) and Energy Efficiency (KWh/100 miles) is the Calculate the total relation matrix Value and Y Value is the same value.

TABLE 6. I-Y Value

1	-0.11111	-0.44444	-0.22222	-0.22222
-0.33333	1	-0.22222	-0.11111	-0.11111
-0.22222	-0.11111	1	-0.33333	-0.22222
-0.22222	-0.33333	-0.22222	1	-0.22222
-0.22222	-0.11111	-0.11111	-0.22222	1

Table 6 Shows the I-Y Value Experience of Grief in a Critical Care Units Connectivity Level (1-5), Data Transmission Rate (Mbps), Latency (ms), Reliability Score (1-10) and Energy Efficiency (KWh/100 miles) table 4 $T = Y(I-Y)^{-1}$, I= Identity matrix and table 5 Y Value Subtraction Value.

TABLE 7. (I-Y)⁻¹ Value

2.564094701	1.238162	1.961298	1.699092	1.520792
1.550601079	1.924865	1.548393	1.341389	1.200626
1.610770363	1.153705	2.489573	1.627331	1.401006
1.734973013	1.378373	1.790174	2.465285	1.48436
1.306611874	0.923516	1.282323	1.255275	1.956882

Table 7 Shows the (I-Y)⁻¹ Value Experience of Grief in a Critical Care Units Connectivity Level (1-5), Data Transmission Rate (Mbps), Latency (Ms), Reliability Score (1-10) and Energy Efficiency (KWh/100 miles) Table 6 shown the Inverse Value.

TABLE 8. Total Relation matrix (T)

	Total Relation matrix (T)				
Connectivity Level (1-5)	1.564094701	1.238162	1.961298	1.699092	1.520792
Data Transmission Rate (Mbps)	1.550601079	0.924865	1.548393	1.341389	1.200626
Latency (ms)	1.610770363	1.153705	1.489573	1.627331	1.401006
Reliability Score (1-10)	1.734973013	1.378373	1.790174	1.465285	1.48436
Energy Efficiency (KWh/100 miles)	1.306611874	0.923516	1.282323	1.255275	0.956882

Table 8 shows the Total Relation Matrix the direct relation matrix is multiplied with the inverse of the value that the direct relation matrix is subtracted from the identity matrix.

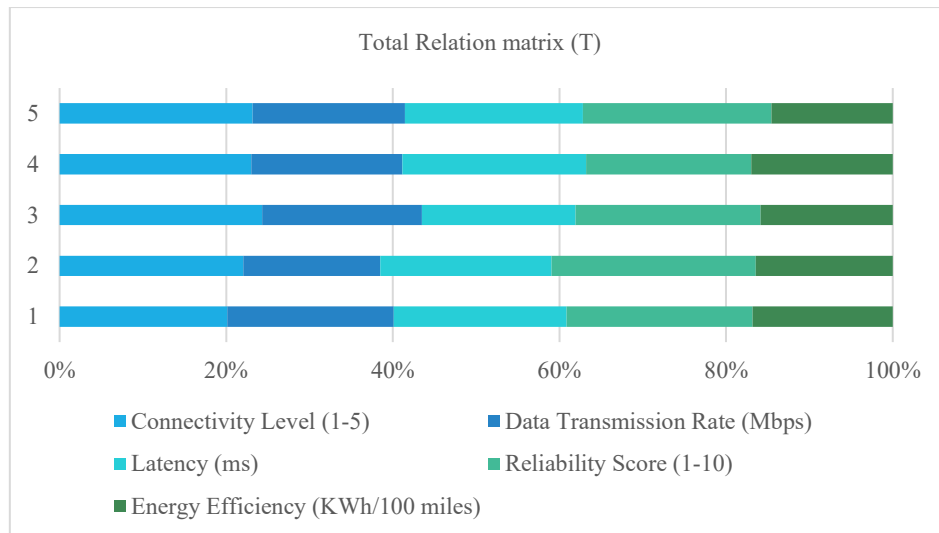


FIGURE 4. Total Relation Matrix (T)

Figure 4 shows The Total Relation Matrix the direct relation matrix is multiplied with the inverse of the value that the direct relation matrix is subtracted from the identity matrix.

TABLE 9. Experience of Grief in a Critical Care Units Ri, Ci Value

	Ri	Ci
Connectivity Level (1-5)	7.98344	7.767051
Data Transmission Rate (Mbps)	6.565873	5.618621
Latency (ms)	7.282385	8.071762
Reliability Score (1-10)	7.853165	7.388371
Energy Efficiency (KWh/100 miles)	5.724607	6.563665

Table 9 shows the Experience of Grief in a Critical Care Units Ri, Ci Value Connectivity Level (1-5) is showing the Highest Value for Ri and Energy Efficiency (KWh/100 miles) is showing the lowest value. Latency (ms) is showing the Highest Value for Ci and Data Transmission Rate (Mbps) is showing the lowest value.

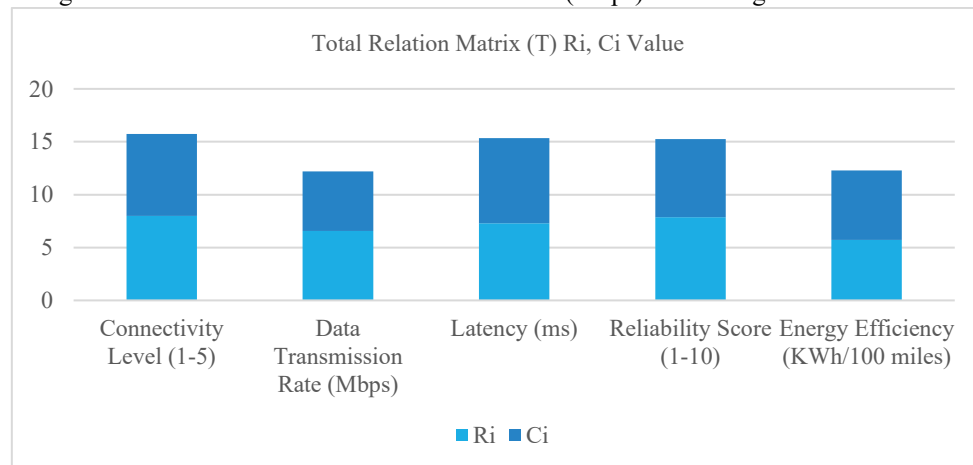


FIGURE 5. Total Relation Matrix (T) Ri, Ci Value

Figure 5 shows the Experience of Grief in a Critical Care Units Ri, Ci Value Connectivity Level (1-5) is showing the Highest Value for Ri and Energy Efficiency (KWh/100 miles) is showing the lowest value. Latency (ms) is showing the Highest Value for Ci and Data Transmission Rate (Mbps) is showing the lowest value.

TABLE 10. Calculation of Ri+Ci and Ri-Ci To Get The Cause And Effect

	Ri+Ci	Ri-Ci	Rank	Identity
Connectivity Level (1-5)	15.75049	0.216389	1	cause
Data Transmission Rate (Mbps)	12.18449	0.947252	5	cause
Latency (ms)	15.35415	-0.78938	2	effect
Reliability Score (1-10)	15.24154	0.464794	3	cause
Energy Efficiency (KWh/100 miles)	12.28827	-0.83906	4	effect

Table 10 shows the Calculation of $R_i + C_i$ and $R_i - C_i$ to Get the Cause and Effect. Experience of Grief in a Critical Care Units is Connectivity Level (1-5), Data Transmission Rate (Mbps), Latency (ms), Reliability Score (1-10) and Energy Efficiency (KWh/100 miles). Connectivity Level (1-5), Data Transmission Rate (Mbps) and Reliability Score (1-10) is Showing the highest Value of cause. Latency (ms) and Energy Efficiency (KWh/100 miles) is Showing the lowest Value of effect.

TABLE 11. T Matrix Value

1.564095	1.238162	1.961298	1.699092	1.520792
1.550601	0.924865	1.548393	1.341389	1.200626
1.61077	1.153705	1.489573	1.627331	1.401006
1.734973	1.378373	1.790174	1.465285	1.48436
1.306612	0.923516	1.282323	1.255275	0.956882

Table 11 shows the T Matrix Value Calculate the Average of the Matrix and Its Threshold Value (Alpha) **Alpha 1.416378803** If the T matrix value is greater than threshold value then bolds it.

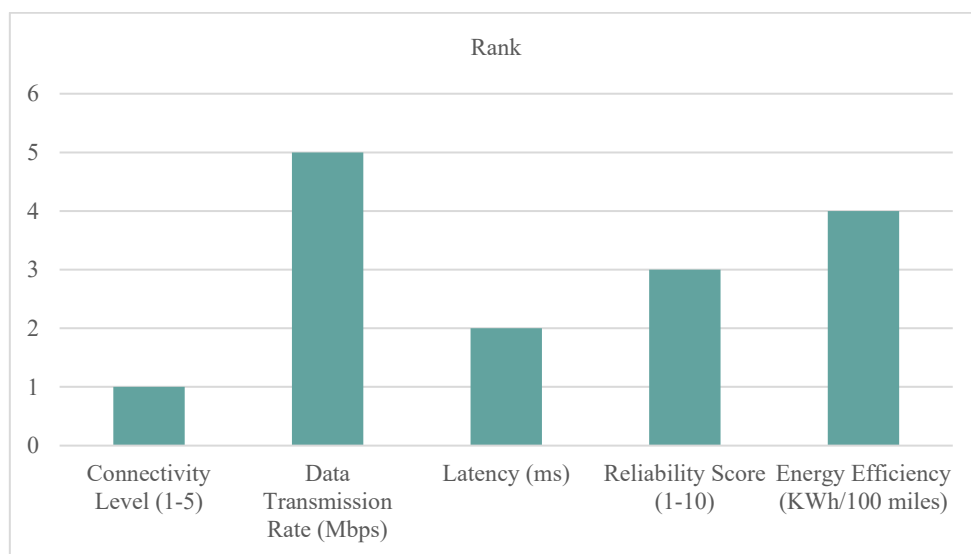


FIGURE 6. Rank

Figure 6 shows the Rank using the DEMATEL for Experience of Grief in a Critical Care Units. Connectivity Level (1-5) is got the first rank whereas is the Data Transmission Rate (Mbps) is having the Lowest rank.

4. CONCLUSION

Experiencing grief in a Critical Care Unit (CCU) is a profoundly emotional and challenging journey for both patients and their families. The environment, characterized by the urgent and often life-threatening nature of illnesses or injuries, creates a palpable atmosphere of tension and anxiety. Families grapple with a profound sense of uncertainty, their hopes and fears intertwining with each passing moment. In this high-stress setting, decision-making becomes an arduous task. Balancing the desire for recovery with the potential for suffering requires navigating a complex emotional landscape. Communication with healthcare providers takes on paramount importance, as families lean on them for guidance, understanding, and hope. Support systems play a crucial role in sustaining families through this ordeal. Whether it's the embrace of loved ones, the counsel of spiritual leaders, or the expertise of mental health professionals, these networks provide solace and strength. Coping mechanisms vary, with some seeking refuge in prayer or meditation, while others find solace in shared conversations. As days pass, an adjustment period unfolds. Families learn to navigate the beeping monitors, bustling medical staff, and the rhythmic hum of machines. The experience, however, doesn't end with a patient's discharge or passing. Grief lingers, finding its place in the days, months, and even years after the critical care unit. It's a journey marked by resilience, love, and the profound human capacity to find meaning even in the face of heart-wrenching loss. Critical care plays a pivotal role in facilitating patient recovery and ensuring their survival. Technological advancements and the ability to prolong the effectiveness of medications have the potential to significantly enhance the chances of patients enduring through critical situations. However, despite the utilization of cutting-edge technologies and the provision of intensive medical and nursing care, the mortality rate for seriously ill adults

in intensive care units (ICUs) remains notable. It ranges from approximately 19.1% to 21.8%, according to ICNARC in 2008. Caring for patients with intricate needs can lead to both emotional and physical strain, as highlighted by Mannahan et al. in 2006 the Rank using the DEMATEL for Experience of Grief in a Critical Care Units. Connectivity Level (1-5) is got the first rank whereas is the Data Transmission Rate (Mbps) is having the Lowest rank.

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