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RESEARCH

Perceptions of caregivers of children with intellectual disabilities regarding the concept of care: research using metaphor analysis method

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Abstract

This study aimed to explore the metaphorical perceptions of caregivers of children with intellectual disabilities regarding the concept of care. Data were collected from 122 caregivers primarily responsible for children attending special education programs. The researchers utilized a metaphor questionnaire form to gather responses, prompting participants to complete the sentence "Taking care of a child with intellectual disabilities is like……. because……" The participants generated 31 metaphors. The most prevalent ones related to caregiving perceptions included patience and effort (11.5%), fighting spirit (8.2%), and affection (8.2%). These metaphors were categorized into four conceptual categories. Positive metaphors were classified under "divine and sacred perception" and "love and commitment," while negative metaphors fell under "care and dependency" and "patience and resilience." *Conclusion*: The study underscores the potential impact of caregivers' perceptions on the caregiving burden. Recommendations include providing targeted support to caregivers with negative perceptions, enhancing their coping mechanisms, and offering psychosocial support for stress and anxiety management. Additionally, it is advised to periodically assess caregivers' metaphorical perceptions and conduct similar studies with different samples of caregivers of children with special needs.

What is Known:

- *Having a child with an intellectual disability is an emotional burden for all family members, a stressful life experience, and requires ongoing coping strategies.*
- *The perceived care burden of family members with mentally disabled children is an important factor affecting the mental health levels of caregivers.*

What is New:

- *This section should briefly summarize the existing knowledge or consensus on the topic. It should not be a comprehensive literature review, but rather a concise statement of the key findings or established principles.*
- *Focus on the most relevant and impactful prior research directly related to your study.*

Keywords Children with intellectual disabilities · Caregiving perception · Caregiver · Metaphor

Introduction

Children with special needs are defined as those who experience physical, sensory, or cognitive limitations resulting from developmental or acquired issues, necessitating specialized care and education tailored to their unique requirements, distinct from their peers [1]. Among this population, those with intellectual disabilities are particularly reliant on comprehensive care and support [2].

In numerous studies, having a child with intellectual disabilities is recognized as an emotional strain for all family

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members, leading to stressful life experiences and necessitating ongoing coping mechanisms [3–6]. Conversely, caring for a child with intellectual disabilities poses significant challenges for families, resulting in disruptions to parental lifestyles, diminished social connections, societal stigma towards individuals with intellectual disabilities, and a lack of awareness [2, 6–9]. Mothers who provide care for children with intellectual disabilities often report encountering academic difficulties, episodes of anger, communication challenges, and societal pressures and exclusion (including negative attitudes and stares from others, exclusion from social gatherings, or self-imposed isolation by families) in their caregiving roles [10]. Consequently, primary caregivers of individuals with intellectual disabilities experience caregiver burden [5, 8, 11–14], which reduces the mental resilience level of caregivers and increases susceptibility to mental illnesses [8, 15, 16].

Caregiving is perceived by caregiver parents in diverse ways, ranging from positive to negative experiences. While it fosters the development of close bonds, heightened dedication fueled by love, receiving social support from others, and personal fulfillment, it also presents caregivers with numerous challenges such as emotional strain, diminished social connections, strained family relationships, financial hardships, and adverse impacts on career trajectories [17, 18]. Caregivers can develop certain perceptions regarding their coping strategies in the face of difficulties they encounter. In a study by Kara [19] involving families of children with special needs, it was revealed that they attribute various meanings to their experiences, including feeling a sense of sinfulness in caring for their child, grappling with feelings of guilt while finding value in life, undergoing trials and demonstrating patience, and ultimately reaching a state of consent and acceptance. Caregivers' perceptions of care reflect their coping abilities and level of psychological resilience. Therefore, it is important to acknowledge the emotions and thoughts related to caregivers' perceptions of caring for their children. Holding a negative perception of caregiving can result in neglecting the care of the child with intellectual disabilities, difficulty in managing anger, and burnout. Understanding caregivers' perceptions of caregiving is imperative as it impacts caregiver burden and mental well-being. In this context, conducting a metaphor analysis on caregivers' perceptions of caring for the child can prove beneficial for evaluating the present situation and improving it [20].

Furthermore, comparisons can facilitate the identification of common characteristics and offer alternative descriptions of a situation [21]. Caregivers' perceptions of caring for children with special needs have been regarded as a phenomenon, and the metaphor analysis method has been employed to explore the underlying concepts shaping their perceptions of care. Recognizing the negative perceptions that contribute to caregiver burden by gaining an insight into caregivers' perceptions of care can yield several important benefits. Firstly, articulating caregivers' perceptions can raise awareness and prove effective in devising coping strategies for the challenges they encounter. Secondly, providing care for a child with intellectual disabilities with a positive perception fosters a stronger bond between the child and the caregiver. Thirdly, identifying negative perceptions in caregiving can help alleviate anxiety, caregiver burden, and stress levels in families with disabled children by facilitating the identification of physiological, psychosocial, and medical support services required for specialized care [8]. Finally, by delving into caregivers' authentic perceptions without depending on scales, valuable insights can be added to the literature concerning families with children with special needs, particularly those with intellectual disabilities. In this context, the following questions have been addressed in this study:

1. What are the metaphors related to the caregiving perceptions of caregivers of children with intellectual disabilities?
2. Under which conceptual categories are the metaphors created by caregivers of children with intellectual disabilities grouped?

Methods

Design

This study utilized a qualitative research method, specifically the phenomenological approach, to identify and address metaphorical perceptions related to the concept of caregiving among caregivers of children with intellectual disabilities.

Sample population

The research was conducted with individuals providing care to children with intellectual disabilities receiving education in two special education and rehabilitation centers affiliated with the Provincial Directorate of National Education in the Middle Black Sea Region of Turkey, specifically in the Kastamonu Province, during the months of November and December. To determine the sample size for inclusion in the study, a sample size formula was utilized for populations with a non-homogeneous structure, resulting in a necessary sample size of $n = 226$ with a $\pm 5\%$ sampling error at a 95% confidence interval. The calculation was performed using the formula: $n = 226$ (1, 96)2 (0, 2) (0, 8)/(0, 5)2 (226 − 1) + (1, 96)2 (0, 2) (0, 8) = 118. Thus, the required sample size was determined to be 118. Initially, information about the research process was provided to the institutions where the study was conducted. Pre-interviews were conducted with mothers bringing their children to the selected institutions regularly for special education. The days and hours caregivers came to the institutions were determined. Face-to-face interviews with caregivers were conducted in the education rooms of the educational institutions during

the times when they brought their children to the institutions. The caregivers included in the study were those who had children diagnosed with intellectual disabilities ranging from moderate to severe, as per DSM-V criteria, and who were enrolled in special education and rehabilitation centers. Additionally, caregivers needed to demonstrate cognitive capacity for adaptation, be responsible for their child's care, fall within the age range of 18 to 65, and consent to participate in the study. In total, 122 caregivers participated in the research.

Data collection

Descriptive form

The descriptive form consists of 14 questions regarding caregivers of children with intellectual disabilities and the children themselves [8, 13, 22].

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A two-stage form was used for data collection. In the first stage, the participants were asked to complete the sentence "Taking care of a child with intellectual disabilities is like…." In the second stage, caregivers were asked to explain the metaphors they associated with the difficulties they encountered by completing the section starting with the phrase "….because…" These forms, filled out by the participants in their own handwriting, were utilized as the primary data collection instrument for the research.

Data analysis

The data collected within the scope of the research were analyzed using the content analysis technique. In content analysis, data are identified and then coded, and this process is followed by categorizing the data [23]. In this study, the analysis of the data was conducted using the "content analysis" technique, performed in five sequential stages. For the analysis of participants' descriptive characteristics, frequency and percentage values were calculated using the Statistical Program for the Social Sciences (SPSS) 24.0 program.

Coding and extraction stage

Firstly, the data underwent an extraction process. Each of the 122 complete data entries was numbered and assigned a code number (e.g., CA1, CA2). The "CA" code constituted the code for the metaphor produced for caregiving. A metaphor image table was created based on the responses provided by the participants.

Sample metaphor compilation stage

The compiled metaphors were arranged alphabetically and reviewed again. The metaphors generated by the participants were analyzed by assigning codes. The relationship between similar metaphors was examined. As a result, a list of sample metaphors was created. The purpose of creating this list is to provide a resource for categorizing metaphors and facilitating metaphor analysis.

Category formation stage

After reviewing all forms and completing the coding and extraction processes, the metaphors were categorized based on their descriptions and the meaning conveyed by the description. When determining categories, the part explaining the metaphor was also examined separately, and an attempt was made to place it in the category that best represented the metaphorical meaning. In this context, a total of four categories were created.

Positive and negative classification stage

In addition to the main categorical distinctions, the metaphors were also classified as positive or negative. This classification was carried out by two independent researchers with expertise in qualitative research, and inter-rater reliability was ensured through consensus discussions. Metaphors reflecting supportive, empowering, hopeful, or spiritually uplifting meanings (e.g., "a gift from God," "a miracle," "happiness," "patience") were coded as positive. In contrast, metaphors expressing dependency, burden, limitation, or hardship (e.g., "a baby that never grows," "elderly care," "a burden," "difficulty") were coded as negative. This evaluation was theoretically grounded in the conceptual metaphor theory proposed by Lakoff and Johnson [24], which emphasizes the role of metaphor in shaping human understanding and experience. These examples were produced through a rigorous coding process based on conceptual metaphor theory.

Validity and reliability stage

Providing a detailed presentation of the research process is crucial for ensuring validity in qualitative research. Therefore, the data analysis was explained in detail. To ensure the reliability of the study, the research model and design were introduced in detail, and to confirm whether the codes (metaphors) given under the conceptual categories reached in the research represented those conceptual categories, two researchers compared the codes and categories. The reliability of the data analysis conducted in this way was calculated using the formula [Agreement/(Agreement + Disagreement) × 100], as suggested by Miles and Huberman [25].

The consistency between the coders was found to be 0.95, indicating that the obtained result is reliable.

Data transfer to computer

The metaphors categorized according to their justifications were calculated for frequency (*f*), which represents the number of participants in the category they belong to. The categorized metaphors were coded according to the participants' justifications and reported. The metaphors resulting from the research were categorized considering their common characteristics and aspects of comparison [26, 27].

Research rigor

This study followed the guidelines proposed by Patton [23] to ensure credibility, dependability, and transferability. To establish credibility, a rigorous and systematic data collection and analysis process based on Patton's [23] content analysis approach was employed. All metaphorical expressions used by caregivers of children with intellectual disabilities were carefully identified, categorized, and discussed among the researchers, with each classification reviewed multiple times. Any disagreements were resolved through in-depth discussions until consensus was reached. To enhance dependability, the research team held regular meetings throughout the data handling process to maintain consistency in analysis and interpretation. Detailed descriptions of the participants and a thorough presentation of the findings were provided to support transferability. Utilizing Patton's [23] content analysis allowed for a structured and comprehensive understanding of caregivers' perceptions of care, strengthening the study's rigor and trustworthiness.

Participants used various metaphors to express their caregiving experiences. For example, expressions such as "like tending to a flower," "like a gift from God," and "a process requiring patience and love" clearly illustrate the emotional intensity and continuous attention involved in caregiving. While these metaphors provide a powerful means to meaningfully convey participants' experiences, their interpretation requires ethical consideration. If metaphors are taken out of context or presented in a misleading way, they may create negative perceptions among readers or result in misrepresentation of participants' experiences.

Therefore, in this study, each metaphor was addressed within an ethical responsibility framework. The meaning and context of each metaphor were carefully evaluated, and participants' expressions were conveyed accurately and respectfully. For instance, the metaphor "like tending to a flower" highlights the ongoing and gentle attention caregiving requires without creating a perception of burden. This approach aligns with existing literature on the ethical dimensions of metaphor and allows for both a deep understanding of participants' experiences and adherence to ethical responsibilities [28].

Ethical considerations

This research was conducted in accordance with the principles of the Declaration of Helsinki. Ethical approval for the study was obtained from the Kastamonu University Social and Human Sciences Scientific Research and Publication Ethics Committee (date: 08.11.2023, decision no: 12/32). Written permission was obtained from the educational institutions where the research was conducted: Öz Yeni Ay Private Education and Rehabilitation Center (99,949,685/600/268 and 20/11/2023) and Akay Private Education and Rehabilitation Center (99,953,757-I00-I991259 and 21/11/2023). A Clinical Trial Number is not applicable for this study Each caregiver was provided with information about the study, and written informed consent was obtained from the participants prior to the initiation of the study.

Results

Characteristics of the participants

The mean age of caregivers was 41. 42.6% completed primary education, 86.9% had social security coverage, 27.9% have three children, and 59.8% receive support in caregiving. The mean age of the children was 13. 78.7% had a moderate level of intellectual disability, and 47.5% were attending vocational training classes (Table 1).

Metaphors

Table 2 displays the metaphors produced by mothers providing care for children with intellectual disabilities regarding the concept of "care," along with some sample expressions from participants. As shown in the table, a total of 31 metaphors were generated by 122 mothers. Upon examining Table 2, it is observed that mothers providing care for children with special needs produced 31 different metaphors in response to the question "Providing care for a child with special needs is like…, because…" It is evident that metaphors such as patience and effort (11.5%), fighting spirit (8.2%), and affection (8.2%) were the most frequently used metaphors.

Categories

Table 3 displays the conceptual categories of the metaphors mentioned by the participants regarding the concept of care. Upon examination of the table, it is observed that the metaphors are grouped into four conceptual categories, namely "divine and sacred perception," "care and dependency," "love and attachment," and "patience and resilience."

Mothers' metaphors have been categorized into four different conceptual categories. Positive metaphors are grouped under "divine and sacred perception" and "love and attachment"

Table 1 Descriptive characteristics of the participants

Descriptive characteristics	Frequency (*f*)	Percentage (%)
Children's mean age = 13		
Caregiving mothers' mean age = 41		
Child's gender		
Female	41	33.6
Male	81	66.4
Degree of disability		
Moderate	96	78.7
Severe	26	21.3
Social security		
Yes	106	86.9
No	16	13.1
Presence of chronic illness in the child		
Yes	29	23.8
No	93	76.2
Child's school		
Preschool	3	2.5
Primary school	33	27
Middle school	10	8.2
High school	18	14.8
Vocational school	58	47.5
Number of children of the caregiver		
1	29	23.8
2	50	41
3	34	27.9
4 +	9	7.3
Education level of the caregiver		
Primary school	52	42.6
High school	46	37.7
Higher Education	24	19.7
Receiving support in child's care		
Yes	73	59.8
No	49	40.2
Caregiver's need for psychological support		
Yes	40	32.8
No	82	67.2
Caregiver's coping method		
None	36	29.5
Religious	47	38.5
Social	29	23.8
Psychological	10	8.2
Presence of chronic illness in the caregiver		
Yes	34	27.9
No	88	72.1
Economic situation		
Good	24	19.7
Moderate	91	74.6
Poor	7	5.7
Receiving education on the education of children with special needs		
Yes	55	45
No	67	55

categories, while negative metaphors are analyzed under "care and dependency" and "patience and resilience" categories (Fig. 1). The categories of metaphors obtained from the content analysis are visually presented in Fig. 1.

Discussion

As one of the qualitative research methods, metaphor analysis is based on the interpretive paradigm. When analyzing metaphors, similarities, dissimilarities, and the relationship between these two concepts are examined. Through the connection between the concepts of similarity and dissimilarity, clues can be obtained about the individual's learning history, accumulation of knowledge, living environment, and perspective on life). The metaphor created by the individual contains implicit meaning which is more important than words. Revealing the implicit meaning hidden within the metaphor allows the transferred meaning to reach higher cognition and enables the individual to gain a new perspective [29, 30]. This study was conducted to determine the perceptions of caregivers of children with intellectual disabilities regarding the concept of care. Participants developed 31 metaphors related to the concept of care. These metaphors were examined under two main headings of positive and negative metaphors and four different conceptual categories. Positive experience metaphors were categorized into two conceptual categories, while negative experience metaphors were divided into two conceptual categories. The findings obtained from the study were discussed in line with the literature.

The care process of children with special needs may lead parents to experience various emotions from emotional, social, and economic perspectives [13, 30–32]. At the same time, changes in many roles of the family lead to the emergence of the concept of care burden. Concepts such as parental role and spouse role can change, often affecting the mother. Particularly, situations such as the mother quitting her job, inability to fulfill the spouse role, and isolating herself from her social circle lead to a greater care burden on the mother [13, 33, 34]. The individuals who participated in this study and took on the responsibility of care are also mothers.

In this study, mothers defined the care of children with intellectual disabilities using metaphors related to "patience and resilience." These metaphors were used to express the resilience and efforts in dealing with the care of the child and the encountered challenges. In her qualitative research conducted through interviews and open-ended survey, Kula (2011) identified that individuals with disabilities and their families model behavior such as patience in the face of difficulties, persistence in achieving goals despite everything, and the understanding that patience in dealing with difficulties and hardships will yield results [35].

In this study, mothers of children with disabilities associated the concept of care with love and attachment. The love for the

Table 2 Metaphors created by the participants

Metaphor code (MC)	Metaphors	*f*	%	Explanations for the metaphors created
1	Patience and effort	14	11.5	"It is like patience and effort because I believe it feels like suddenly encountering an obstacle in the flow of life." (P-9) "It is like a rock of patience because it requires resilience and endurance; a mother shows resilience against hardships." (P-12) "It is like patience because I can carry out what is required by this hardship only through patience." (P-13) "It is like patience because I believe that we achieve some things by talking to him." (P-56) "It is like love and patience because it is a fact that patience is the only thing that manages well when your nervous system is strained." (P-70) "It is like patience because I can only manage my child's care with patience." (P-101)
2	Fighting spirit	10	8.2	"It is like being a fighter. He couldn't walk, he couldn't talk, and I emphasized his fighting spirit." (P-1) "It is like being a fighter because being able to stand up again without giving up every time he takes a step back." (P-5)
3	Affection	10	8.2	"It is like affection because her presence brings joy to me." (P-2) "It is like love because taking care of him, being happy, loving him increases the joy and happiness within me." (P-3) "It is like affection because it requires effort, constant attention, and patience." (P-31) "It is like affection because taking care of him gives me peace and happiness." (P-49)
4	Kindness	6	4.9	"It is like kindness because taking care of her, helping her, and creating memories together make me feel good." (P-19) "It is like kindness because I don't want to hurt or upset my child. I need to accept everyone as they are and manage accordingly." (P-28)
5	My heaven	6	4.9	"It is like heaven to me because it's very special." (P-7) "It is like heaven to me because taking care of my child perfectly is like experiencing heaven for me." (P-81) "It is like heaven to me because when I think of my child, I think this is the only feeling that comes to my mind." (P-92)
6	Being like a wall	5	4.1	"It is like being a wall because I realized the importance of standing as a barrier against stress and depression." (P-23) "It is like being a wall because the determination of the mother protects her family from stress; this resistance helps to overcome difficulties." (P-39)
7	Miracle	5	4.1	"It is like a miracle because my child is a gift to me." (P-93) "It is like a miracle because my child added hope and joy to my life." (P-122)
8	Looking after a baby	4	3.3	"It is like taking care of a baby because it requires constant love, affection, and attention." (P-48) "It is like a baby in the growth process; it constantly needs attention and special care." (P-61)
9	Present	4	3.3	"It is like a gift because I believe that God gave him as a gift, as a grace." (P-73) "It is like a gift because his existence is the greatest gift for me." (P-98)
10	Goat	4	3.3	"It is like arguing with a goat because she is stubborn and obstinate." (P-103) "It is like arguing with a goat because he is so stubborn." (P-119)
11	Compassion	4	3.3	"It is like compassion because loving him gives me peace and happiness." (P-77) "It is like compassion because I believe that patience cannot exist where there is no mercy." (P-83)
12	Understanding	4	3.3	"It is like understanding because listening to him, caring for him, having him, and getting along with him are important to me, so I liken taking care of him to understanding." (P-13) "It is like understanding because I think we achieve some things by talking to her." (P-21) "It is like understanding because what is required for caregiving is only reinforced by understanding." (P-88)
13	Endless care and compassion	4	3.3	"It is like endless care and affection because the emotions caused by caregiving makes me feel like this." (P-4) "It is like endless care and affection because taking care of her does not feel like a burden but rather like a sun. I believe that we will reach the light no matter what." (P-13)

Table 2 (continued)

Metaphor code (MC)	Metaphors	*f*	%	Explanations for the metaphors created
14	Looking after a flower	3	2.5	"It is like the growth of a flower because with watering, care, and love, it gains beauty and strength." (P-92) "Providing care is like ensuring the growth of a sapling; as it is nurtured with love and tended to carefully, the child develops." (P-99) "Caring is like tending to a flower without harming it; it requires sensitivity and attention." (P-122)
15	Misfortune	3	2.5	"It is like misfortune because when I look at other children, I wonder why my child is like this." (P-7) "It is like misfortune because it is not a feeling that others can understand just by explaining." (P-22) "It is like misfortune because I feel like it suddenly stands out as an obstacle in the flow of life." (P-27)
16	Sun	3	2.5	"It is like the sun because looking after him does not feel like a burden; rather, I believe we will reach brightness like the sun, no matter what." (P-28)
17	Precious belonging	3	2.5	"It is like a precious item because it needs to be treated like a treasure; they are our most valuable possessions, and we need to keep them in a safe." (P-37) "It is like a precious item because its existence is the greatest gift for me." (P-49)
18	Hope	3	2.5	"It is like hope because I hope that everything will heal with hope, love, and help." (P-39) "It is like hope because I always have hope that my child will recover." (P-46)
19	Mercy	3	2.5	"It is like mercy because I believe that without mercy, there can be no patience." (P-8) "It is like being merciful because I do not want to hurt or upset my child. I need to manage everyone as they are." (P-21) "It is like being merciful because loving him brings me peace and happiness." (P-90)
20	Sapling	3	2.5	"It is like a sapling because I believe my child needs care, watering, and love to stay alive like a sapling." (P-13) "It is like a sapling because just like a sapling needs care and attention, my child also needs love to not wither away." (P-97)
21	Trying to manage	3	2.5	"It is like getting used to managing because even though I love him, taking care of him is tough." (P-17) "It is like getting used to managing because dealing with everything related to her requires patience and effort." (P-34) "It is like getting used to managing because taking care of him is not like taking care of a normal person. It is not normal; we're tested." (P-38)
22	A unique jewel	3	2.5	"It is like a unique jewel because they are delicate children, and they need to be treated more carefully in their care." (P-26) "It is like a unique jewel because it feels good to take care of him, help him and create memories." (P-38) "It is like a unique jewel because it is necessary to be understanding and compassionate towards the child." (P-69)
23	Essence of my life	3	2.5	"It is like having someone in the center of my life because I am constantly taking care of him; my whole life revolves around my child." (P-72)
24	Watering knowing the flower will not bloom	3	2.5	"It is like watering a flower knowing it won't bloom because we wake up every day with a hope for a disease we know has no cure." (P-119) "It is like watering a flower knowing it won't bloom because even though my child's condition is difficult, my love and hope for him never fade." (P-120)
25	A fellow traveler	2	1.6	"It is like being a companion on a journey because I want him to progress quickly." (P-30) It is like being a companion on a journey because care requires being with him every moment." (P-110)
26	Reward	2	1.6	"It is like earning abundant rewards because providing care to him is a beautiful feeling for me, a blessing bestowed upon me by God." (P-80)
27	Lack of enjoyment	1	0.8	"It is like a lack of enjoyment because I carry a heavy burden, taking on many things at once." (P-29)
28	Grinding the edges of life	1	0.8	"It is like a lifelong grind because it's very difficult, it never ends, it's constant." (P-108)
29	Elderly care	1	0.8	"It is like caring for the elderly because I don't understand their language and my child's language." (P-79)

Table 2 (continued)

Metaphor code (MC)	Metaphors	*f*	%	Explanations for the metaphors created
30	Love	1	0.8	"It is like love because it requires effort, constant attention, and patience, so it's like love." (P-99)
31	Obligation	1	0.8	"It is like an obligation because providing care is the only option." (P-22)

Table 3 Conceptual categories

Category	Metaphors	Expressions Associated with Metaphors	*n*	%
Care and dependency	Infant and elderly care metaphors	It is like taking care of a baby It is tough because he does not understand It is like a flower; it constantly requires attention It's like taking care of a baby that never grows It is like taking care of a newborn baby It is like taking care of an elderly person	14	11.5
	Flower and garden metaphors	It is like tending to a flower It blossoms, constantly craving attention It is like caring for a flower; it requires constant care It's like a sapling, needing care and affection		
Divine and sacred perception	God and divine metaphors	It is like having a gift from God, like a blessing It is like being in heaven It is like a gift It is like being with an angel	18	14.7
Love and attachment	Luck and value metaphors	It is like being lucky but impatient It's like a great fortune It is like having a precious item	41	33.6
	Love and affection metaphors	My child is like a blessing because I love him so much It's like love It's like love, as it requires effort It's like happiness It's like love and patience		
	Metaphors of hope and optimism	It's like hope It is like a miracle, because she is my angel It's like a challenging process to overcome It's like being a companion on the journey, wanting them to progress quickly		
	Metaphors of life and lifetime	It's like someone being the most important thing in your life It's like life itself, a reason to hold on to living It's like special attention		
Patience and resilience	Patience and struggle metaphors	It's like having a fighting spirit It is patience; it is like heaven to me It's like patience because it feels like an obstacle to the flow of life It's like patience and effort It's like understanding because I believe we can achieve things by talking to him It is like being extremely patient	49	40.2
	Wall and management metaphors	It's like being a rock, emphasizing the importance of standing against stress It's like getting used to managing		
	Difficulty and hurt metaphors	It's like difficulty, requiring effort and time It's like difficulty, not something easily understood by others It's like looking after without causing harm		

child, the value of time spent with them, and the positive emotions experienced as a result of this relationship were expressed. In a study conducted by Bardakcı and Kutluata [22] with parents of children with disabilities, parents expressed that they learned love and compassion during the care process. Some mothers expressed during the interviews that their love for their child

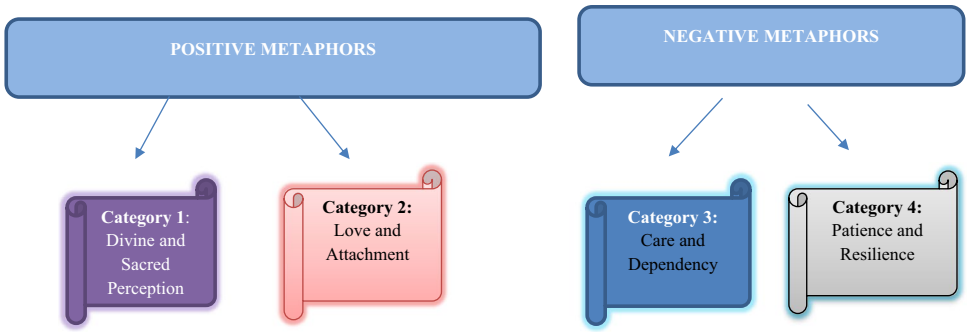


Fig. 1 Categories for the care of disabled children

with disabilities was different from the love they felt for their other children.

It is evident that life is filled with pain and disasters. As individuals cope with these disasters, struggle against them, and ultimately overcome them, they embrace life again, leading a harmonious life with society and themselves. Particularly in perceiving, explaining, accepting, and coping with unwanted and unexpected situations, religious beliefs, attitudes, and behaviors have a significant influence. Religious coping emphasizes the positive role of religion in understanding and solving various personal and situational problems that enter people's lives, within a complex and variable process [19, 36–38]. In the study, some metaphors produced by mothers were grouped under the divine and sacred category. It was determined that some mothers perceive caring for children with intellectual disabilities as a responsibility given by God in this category. This finding of the study emphasizes the importance of religious beliefs and spirituality in accepting the situation and coping with the difficulties of caregiving. In a study conducted by Yüksel and Tanrıverdi [39] with mothers of children with special needs, mothers expressed that having a child with special needs was a test from the Creator. In the research conducted by Ercan and Kula [38] on religious coping in families with individuals with special needs, it was found that there is a statistically significant difference in favor of individuals with moderate to severe special needs between their level of special needs and positive religious coping [38]. Some mothers stated that, beyond being a test of being a good mother for themselves, over time they have begun to see this situation as a blessing from God through the disability and innocence of their children. Studies conducted in Turkey also reveal that parents of disabled children frequently use religious coping, drawing support from hope and patience [35, 40, 41]. The finding of the study is consistent with the literature.

The analysis of negative metaphors within the Patience and Resilience category provides a detailed understanding of the challenges faced by caregivers of children with special needs. Participants described caregiving using expressions such as "it is patience because it feels like an obstacle to the flow of life," "it's like difficulty, requiring effort and time," and "it's like being a rock, emphasizing the importance of standing against stress." These metaphors not only reflect the emotional burden and continuous effort inherent in caregiving but also reveal the resilience, determination, and coping strategies that caregivers develop over time [28].

Although negative metaphors highlight challenges, they must be interpreted carefully to avoid misrepresenting caregivers' experiences. When taken out of context, readers may perceive caregiving solely as stressful or burdensome, potentially overshadowing caregivers' dedication, love, and personal growth. Therefore, the analysis emphasized participants' resilience and adaptive strategies, ensuring that interpretations remained consistent with the intended meaning of their expressions. This approach aligns with previous research emphasizing the ethical necessity of contextualizing metaphors in qualitative studies [28, 42]. Integrating ethical reflection into the analysis allows for a comprehensive understanding of caregivers' experiences while respecting their perspectives.

In this study, mothers generated metaphors related to caring for children with intellectual disabilities' special needs using baby and elderly care metaphors, as well as flower and garden metaphors, defining the caregiving process with expressions related to "care and dependency." It has been emphasized that the child is a being requiring constant attention and care, highlighting the sensitivity and need for attention in the caregiving and nurturing process. These metaphors contain emotions and thoughts referring to the baby, such as the care, love, and perception of the baby as a special and valuable being. In the research conducted by Efilti, Demirci, and Karaduman [43] on metaphors created for the concept of "children in need of special education," it was determined that common metaphors included baby, angel, flower, seed, bird, and innocence. In the study conducted by Kazu and Yıldırım [44] with special education teachers, it was observed that metaphors related to babies and flowers were generated regarding individuals with special needs. Our study is consistent with the literature in this respect.

Limitations of the study

The research did not incorporate any caregiving assessment scales and relied solely on responses gathered through interviews, using a form devised by the researchers to analyze

caregiving perceptions through metaphorical analysis. Furthermore, the study is confined to caregivers of children with intellectual disabilities enrolled in three special education and rehabilitation centers within a single province. Given the absence of metaphorical studies focusing on caregivers of children with special needs, it is anticipated that this study could serve as a precedent for future research endeavors. This aspect underscores a notable strength of the study.

Conclusions

Positive metaphors used by caregivers are classified into categories such as "divine and sacred perception" and "love and attachment." Caregivers who embrace these positive metaphors demonstrate effectiveness in managing the challenges of caregiving. Their perception of caregiving is not burdened by negative connotations. Conversely, the presence of negative metaphors within the "care and dependency" and "patience and resilience" categories highlights the challenges faced by caregivers of children with special needs, underscoring the need for comprehensive support services encompassing physiological, psychosocial, and medical aspects. Implementing effective coping strategies aimed at fostering acceptance of the child by caregivers, along with the provision of psychosocial support when required for managing stress and anxiety, will contribute to the cultivation of positive metaphors. Moreover, it is imperative to bolster institutions, organizations, and civil society groups that advocate for the inclusion of caregivers and children with intellectual disabilities in social activities.

Relevance to clinical practice

It was determined that the metaphor perceptions of those caring for children with intellectual disabilities regarding the concept of care affected the care burden. The knowledge that caregivers with negative perceptions should be provided with support in the areas they need in the care of their child, their coping capacities should be increased, and psychosocial support should be provided when needed in the management of their stress and anxiety is enlightening for both healthcare professionals and educators.

A metaphor-based approach reveals the nuances of caregiving experiences by revealing the challenges caregivers experience, the coping strategies they develop, and the emotional investments they demonstrate. In this way, the study contributes both to the academic literature and guides the development of individualized support and intervention strategies to better meet the needs of caregivers in clinical practice.

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Data availability The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available because of privacy or ethical restrictions.

Declarations

Competing interests The authors declare no competing interests.

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