

ORIGINAL RESEARCH

Determining the degree of resilience among nurse educators in Saudi Arabia

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ABSTRACT

The study employed a cross sectional study approach with quantitative a data collection method, to explore the experiences of nurse educators in Saudi Arabia regarding their resilience. The study was conducted in a large hospital in Al-Ahsa, using a convenience sampling method to recruit 158 nurse educators from different five hospitals. Data was collected through a self-administered questionnaire and semi-structured interviews and analyzed using descriptive and inferential statistics and thematic analysis. A total of 77 nurses participated in this study with with age majority (74%) of from 30 to 40 years and 63.6% Saudi Arabian. There are only few numbers of participants have a high level of resilience. The study findings reported that there was no significant difference ($p > .05$) in the resilience level according to demographic characteristics such as age, gender, years of experience, income, type of hospital where they are working in, nationality, and work shifts.

Key Words: Adversity, Nurse Educator, Resilience, Saudi Arabia

1. INTRODUCTION

1.1 Introduce the problem

The nursing field plays a critical role in providing quality healthcare services in Saudi Arabia, and nurse educators have a vital responsibility in preparing nursing students to become resilient healthcare professionals.^[1] However, the COVID-19 pandemic has presented significant challenges to nursing education in Saudi Arabia, including adapting to new teaching methods and ensuring the safety of students and faculty members.^[2] In Saudi Arabia, nursing students and staff nurses face various challenges in delivering quality healthcare services, particularly during the ongoing COVID-19 pandemic. To ensure that healthcare professionals can cope with these challenges, recent studies have focused on identifying the factors that contribute to resilience among nursing students

and staff nurses in Saudi Arabia. These studies are crucial in enhancing the healthcare system's preparedness to deal with the pandemic.^[3] The findings of these studies can help nurse educators and healthcare institutions develop strategies to support nursing students and staff nurses in overcoming resilience challenges and delivering quality patient care. Through the identification of these factors, healthcare professionals in Saudi Arabia can better understand the importance of resilience in healthcare service delivery, as well as the need for ongoing support and guidance to promote resilience among nursing professionals. Academic resilience is one such factor identified in a study by Grande et al. (2022),^[4] which found that academic resilience significantly predicted the quality of life of nursing students. Hence, nurse educators must provide the necessary support and guidance to help

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students overcome nursing education challenges and become resilient healthcare professionals.^[5] Emotional intelligence is another critical factor that contributes to staff nurses' resilience, as highlighted in a study by Aljarboa et al. (2022) on the impact of emotional intelligence on staff nurses' resilience during the COVID-19 pandemic.^[6] The study found that emotional intelligence significantly predicted resilience among staff nurses and is essential in managing emotions, communicating with colleagues and patients, and providing quality healthcare services. Thus, nurse educators must integrate emotional intelligence training into nursing education programs to help foster emotional intelligence in nursing students.^[7]

1.2 Explore importance of the problem

Students and professionals in the nursing field might tremendously benefit from having a strong social network. During the 2009 COVID-19 pandemic, Pineda et al. (2022)^[8] studied the relationships between coping skills, social networks, loneliness, and overall well-being. Among nursing students and professionals, social support was found to have a significant effect on resilience, quality of life, and loneliness.^[9] The results of the study highlight the significance of expanding the social support networks of healthcare professionals in order to enhance their health and well-being. Despite the difficulties brought on by the COVID-19 epidemic, there are examples of resilience and recovery among nursing educators and other healthcare professionals in Saudi Arabia. In light of the global spread of the COVID-19 virus, Sundarasan et al. (2020)^[10] studied the preparedness and resilience of SMEs in Saudi Arabia. The importance of perseverance in the face of the challenges posed by the epidemic are emphasised in the study. The importance of long-term business and economic success is emphasised in the paper, as is the need for resilience planning.^[4]

Other studies have looked into the problems that nursing students and other healthcare workers encounter, in addition to the ones that were emphasised above. One such study, by Aljohani et al. (2021),^[11] examined the causes of stress among Saudi nursing students. According to the research, nursing students face large amounts of stress due to factors like nursing shortages, problems in the nursing school system, and a negative public perception of the profession.^[6] Researchers Ali et al. (2021) analysed data collected in Saudi Arabia.^[12] This research sheds light on the difficulties dentists confront, such as the importance of PPE and the results of service limitations.^[8] A study of critical care nurses' perspectives during the COVID-19 pandemic was undertaken by Alharbi et al. (2020).^[13] Fear of catching COVID-19 and the emotional and psychological burden of caring for

critically ill patients are only two of the obstacles that the study highlighted for critical care nurses.^[10]

Research has shown that Saudi Arabia needs to prepare for a resilient health workforce in order to meet the challenges posed by an ageing population and evolving healthcare requirements. The advantages and disadvantages of an ageing population in Saudi Arabia were examined by Lin et al. (2021).^[14] To fulfil the healthcare requirements of an ageing population, the report emphasises the importance of planning for a resilient health workforce. Educating future nurses in Saudi Arabia has been complicated by the recent COVID-19 outbreak.^[11] However, among Saudi Arabia's nursing educators and other healthcare professionals, there are also tales of resiliency and recovery. Strategies to enhance nursing education and healthcare delivery in Saudi Arabia can be informed by a better understanding of the elements that contribute to resilience in the face of adversity. According to research by Grande et al. (2022),^[4] emotional intelligence, and social support of nursing students. Making sure the Saudi Arabian population's healthcare demands are satisfied relies heavily on the country's ability to plan for a resilient health staff. Educators in the nursing profession are vital to the success of the next generation of nurses. However, due to the difficulties of their jobs, stress, burnout, and high turnover are not uncommon outcomes. Cultural differences, a lack of funds, and a talent gap all contribute to a difficult environment for nursing education in Saudi Arabia. Many Saudi Arabian nurse educators show persistence in the face of adversity and keep on teaching their pupils effectively. This research aims to hear the experiences of perseverance from Saudi nurse educators. The study's overarching goals are to get a better understanding of the difficulties faced by nurse educators, the solutions they employ to cope with those difficulties, and the characteristics that contribute to their resilience.^[4]

The study is significant for several reasons. First, it can provide insight into the experiences of nurse educators in Saudi Arabia and the unique challenges they face. Second, the study can inform nursing education and training programs by identifying effective Resilience strategies and factors that contribute to resilience among nurse educators Third, the study can contribute to the literature on resilience and its importance in the nursing profession. In conclusion, this study aims to explore the stories of resilience among nurse educators in Saudi Arabia. The study's findings can inform nursing education and training programs and contribute to the literature on resilience in the nursing profession.

1.3 Describe relevant scholarship

Despite these challenges, nurse educators in Saudi Arabia are committed to preparing their students to meet the de-

mands of the healthcare system. They play a critical role in addressing the shortage of healthcare professionals in the country by ensuring that their students are well-equipped to provide quality healthcare services. Nurse educators must be innovative and creative in their teaching methods to engage students and promote active learning. They must also be adaptable and flexible in response to the changing needs of the healthcare system. Ultimately, nurse educators are instrumental in shaping the future of healthcare in Saudi Arabia by training the next generation of nurses who provide essential healthcare services to the community. Despite these challenges, many nurse educators in Saudi Arabia demonstrate remarkable resilience and continue to provide high-quality education to their students. Resilience is the ability to adapt and recover from stress, adversity, and trauma. It is an essential characteristic for healthcare professionals, particularly those working in high-stress environments. Nurse educators in Saudi Arabia face various challenges that can lead to stress, burnout, and job dissatisfaction. These challenges include language barriers, cultural differences, limited resources, and a shortage of qualified educators. However, despite these challenges, many nurse educators in Saudi Arabia demonstrate remarkable resilience. The stories of resilience among nurse educators in Saudi Arabia are inspirational and insightful. These stories can provide valuable lessons for other healthcare professionals and organizations. By studying the experiences of nurse educators in Saudi Arabia, we can learn more about the factors that contribute to resilience and develop effective strategies to support healthcare professionals in high-stress environments. One of the factors that contribute to resilience among nurse educators in Saudi Arabia is their sense of purpose. Nurse educators in Saudi Arabia are motivated by their commitment to their students and their desire to make a positive impact on the healthcare system. They see their role as critical to improving the quality of healthcare in Saudi Arabia and are dedicated to providing their students with the best possible education.^[10]

Another factor that contributes to resilience among nurse educators in Saudi Arabia is their ability to adapt to change. The healthcare system in Saudi Arabia is constantly evolving, and nurse educators must be able to adapt to new technologies, teaching methods, and healthcare practices. Nurse educators in Saudi Arabia are skilled at adapting to change and are always seeking new ways to improve their teaching methods and enhance their students' learning experiences. In addition to their sense of purpose and ability to adapt to change, nurse educators in Saudi Arabia also demonstrate effective Resilience strategies.^[12] These strategies include seeking social support, engaging in self-care activities, and maintaining a positive outlook. Nurse educators in Saudi Arabia

understand the importance of self-care and prioritize their physical and emotional well-being.^[13]

1.4 State hypotheses and their correspondence to research design

When it comes to shaping the future of nursing and the healthcare system as a whole, nurse educators are indispensable. The health and development of nurse educators are threatened by a number of factors, including the influence of cultural and social norms on the workplace, language obstacles, and the rising need for qualified nurses. Saudi Arabia's healthcare system is under unprecedented strain due to the ongoing COVID-19 outbreak. Educators of future nurses have had to deal with the emotional toll of the epidemic as well as the logistical challenges of implementing new infection control and patient care standards. The necessity to study the coping mechanisms of nurse educators in Saudi Arabia has been heightened by the pandemic.^[14-17]

2. METHOD

2.1 Identify subsections

Researchers want to employ both quantitative and qualitative techniques to learn more about nurse educators' perspectives on resilience in Saudi Arabia. The study on "Strength in Adversity: Stories of Resilience among Nurse Educator in Saudi Arabia" aims to understand the experiences of nurse educators in Saudi Arabia regarding resilience in their professional and personal lives. To achieve the research objectives, the researchers plan a quantitative research design involved administering a survey to a sample of nurse educators in Saudi Arabia to collect data on their experiences with resilience. The survey was designed to gather information on various aspects of resilience, including coping strategies and personal characteristics that contribute to resilience. This design was chosen because it allows for a holistic understanding of nurse educators' experiences with resilience in Saudi Arabia.

2.2 Participant (subject) characteristics

The upcoming study aims to recruit 77 nurse educators from five different hospitals using the convenience sampling method. This approach was chosen to obtain a sample of nurse educators who are readily available and willing to participate in the study, which is a commonly used and practical method in health and nursing research. The sample size of 77 nurse educators was determined based on previous research on resilience and is considered sufficient for quantitative analyses. The study aimed to recruit participants from various departments and units within the hospital to ensure a representative sample using a stratified sampling technique.

2.3 Sampling procedures

2.3.1 Inclusion criteria

- 1) Registered nurse educators working in Saudi Arabia
- 2) Willingness to participate in the study
- 3) Ability to communicate in Arabic or English
- 4) Currently providing education and training to nursing students or healthcare professionals
- 5) Minimum of two years of experience as a nurse educator

2.3.2 Exclusion criteria

- 1) Non-nurse educators.
- 2) Refusal to participate in the study
- 3) Nurse educators with Nurturing relationships and networks.
- 4) Less than two years of experience as a nurse educator.

2.4 Sample size, power, and precision

The sample size was calculated by Thomas Thompson equation $n = N P(1-P)(N-1)(dz)^2 + p(1-p)$ Where:

- N = population size
- Z = the Z-score associated with the desired confidence level (e.g., 1.96 for a 95% confidence level)
- p = the estimated proportion of the population with the characteristic of interest
- q = 1 - p
- d = the desired margin of error

2.5 Measures and covariates

The data was collected from nurse educators in Saudi Arabia. Quantitative data was collected through a self-administered questionnaire that includes validated scales and measures to assess the level of resilience, and other relevant variables.

2.6 Research design

A cross sectional quantitative study design as used. A self-administered questionnaire was used for data collection. It included 5 sections.

Section 1: includes basic demographic information such as name, age, gender, education level, number of years working in hospitals, and number of years teaching nursing students in Saudi Arabia.

Section 2: includes Resilience Scale (RS-14) developed by Surzykiewicz, Konaszewski, and Wagnild (2019).^[18]

The study utilized the RS-14 scale to determine the level of resilience among participants. This scale comprises 14 items that assess an individual's ability to adapt to stress and adversity and has been shown to be reliable and valid in various populations, including healthcare professionals and university students. Participants rated their agreement with each item on a 7-point Likert scale ranging from 1 (Strongly disagree) to 7 (Strongly agree). A higher total score indicates a higher level of resilience, with scores ranging from 14 to 98.

Scores below 65 indicate low resilience, scores between 65 and 81 indicate moderate resilience, and scores above 81 indicate high levels of resilience. The RS-14 scale's reliability and validity have been established through measures.

2.7 Validity and reliability

A pilot study on 9 nurse educators was done previously to assure the tools items' validity and using Cronbach alpha as tool for items' reliability that showed a degree of reliability for total score of this tool equals 0.81 which referred to a high reliability.

2.8 Data analysis

A SPSS version 25.1 was used to analyze the data extracted from the questionnaire, using descriptive statistics such as mean and standard deviation for measuring the numerical data and demographic data in addition to sample *t* test and ANOVA tests for other inferential data statistics.

3. RESULTS

3.1 Recruitment

Table 1 revealed that there were 77 Nurse Educators. The majority (96.1%) were female, while 3.9% were male. Among them, 74% fell within the age range of 30 to 40 years, 16.9% were under 30 years old, and 9.1% were over 40 years old. Regarding marital status, the majority (74%) were married, and 26% were single. In terms of years of experience, most had between 4 to 15 years of experience, with 18.2% having less than 4 years and some having more than 15 years.

As for their workplace, 45.5% worked at KFHH, 26% at PSBIH, 18.2% at MCH, 7.8% at KFGH, and 2.6% at Al-OMRAN Hospital. In terms of education, 57.1% held a diploma, 31.2% had a bachelor's degree, and 11.7% had a master's degree. In regard to nationality, 63.6% were Saudi, and 36.4% were non-Saudi. When it came to income, 55.8% earned between 10,000 and 20,000 SR, 41.6% earned less than 10,000 SR, and 2.6% earned more than 20,000 SR.

3.2 Statistics and data analysis

Table 2 showed the level of resilience among Nurse Educator in Saudi Arabia was moderate with mean sum score 56.79, the highest score items were (My life has meaning) with mean score 4.42, (I feel proud that I have accomplished things in life) with mean score 4.30, and (In an emergency, I'm someone people can generally rely on.) with mean score 4.27, and the lowest score items were (I usually take things in stride) with mean score 3.86, (I feel that I can handle many things at a time) with mean score 3.79, and (I can usually find something to laugh about) with mean score 3.74.

Figure 1 showed the majority (68.8%) of the Nurse Educator

in Saudi Arabia had moderate resilience level, 23.4% high, and 7.8% low.

Table 1. Demographic characteristics

Variables	N	%
Gender		
Male	3	3.9
Female	74	96.1
Age		
Less than 30 years	13	16.9
From 30 to 40 years	57	74
More than 40 years	7	9.1
Marital status		
Single	20	26
Married	57	74
Years of experience		
Less than 4 years	14	18.2
From 4 to 15 years	53	68.8
More than 15 years	10	13
Work Place		
Al-OMRAN Hospital	2	2.6
KFGH	6	7.8
KFHH	35	45.5
MCH	14	18.2
PSBIH	20	26
Level of education		
Diploma	44	57.1
Baccalaureate	24	31.2
Master	9	11.7
Nationality		
Saudi	49	63.6
Non-Saudi	28	36.4
Income		
Less than 10,000 SR	32	41.6
From 10,000 to 20,000 SR	43	55.8
More than 20,000 SR	2	2.6
Work shift		
Day	55	71.4
Shift	22	28.6

Table 3 showed there was no significant difference in the resilience level according to demographic characteristics.

Table 4 showed the level of resilience among Nurse Educator in Saudi Arabia was moderate with mean sum score 56.79, and showed the majority (68.8%) of the Nurse Educator in Saudi Arabia had moderate resilience level, 23.4% high, and 7.8% low, but there was no significant difference in the resilience level according to demographic characteristics.

4. DISCUSSION

This study aims to understand the experiences of nurse educators in Saudi Arabia regarding resilience in their professional and personal lives, in this study, a total of 77 nurse educators

participated in this study with majority of female in gender, and it is predominantly observed that nurse educators with most females than males.^[19] Most of them have experiences more than 4 years and have a postgraduate study such as diploma and master's to be able to give a relevant and valuable reports about this study aims.^[20]

Investigating the resilience which is meant to be the successful adaptation to arduous or demanding nursing profession circumstances, with emphasis on the cognitive, emotional, and behavioral flexibility^[21] among selected nurse educators has found to be moderate in Saudi Arabia selected hospitals, the resilience degree was moderate due to lacking Insufficient awareness, inadequate self-control, limited problem-solving abilities, and a dearth of social support,^[22] it is in agreement with Berma et al. (2022)^[23] study, who performed a quasi-experimental design with pre-post evaluation was employed in this study. The study sample comprised twenty nurses employed at a psychiatric health and addiction treatment center located in Port Said City. The study revealed that psychiatric education nurses exhibited a modest level of resilience, as shown by their mean score, prior to the implementation of the intervention. However, following the completion of the program, these nurses demonstrated a significantly higher mean score in resilience and with Albaqawi and Sanat Alrashidi's (2022)^[24] study, who employed a quantitative-comparative correlational research approach, utilizing a self-administered questionnaire to collect data from a sample of 393 nurses in the Hail Region, Saudi Arabia. The distribution of adapted questionnaires was conducted via a Google Form survey. The nurses had a moderate level of moral resilience, as indicated by a score of 2.74 out of 4. There was no significant association found between the assigned ward and age variables and the levels of felt stress and moral resilience. The nurses were observed to exhibit a moderate level of resilience, while it is in contrast to Alkaissi et al. (2022)^[25] study, who reported from total of 290 participants responded to the survey, providing data on trait, state, and combination resilience scores. The mean trait resilience score was 71.4, the mean state resilience score was 62.7, and the mean combined resilience score was 134.1. A notable and statistically significant moderate positive connection was seen between the scores of state resilience and trait resilience ($p < .001$). This finding suggests that educators in the field of nursing in Palestine tend to exhibit relatively high levels of both trait and state resilience. The presence of regular study practice was found to be a significant predictor of higher scores in trait, state, and combination resilience.

There are only few numbers of participants have high level of resilience, it may be due to developing pragmatic and achievable action plans, implementing plans with efficacy,

or possessing proficient communication abilities,^[26] it is in agreement with Keener et al. (2021)^[27] study, who conducted a cross-sectional survey was done with nursing faculty members at a public institution located in a remote Appalachian

region. The survey aimed to assess the resilience levels of nurse educators who participated in the study. The results indicated that these nurse educators exhibited high resilience scores.

Table 2. The response of participants to resilience

No	Potential Risk Items	Mean	SD
1	I usually manage one way or another	3.88	0.74
2	I feel proud that I have accomplished things in life	4.30	0.76
3	I usually take things in stride	3.86	0.77
4	I am friends with myself	4.19	0.69
5	I feel that I can handle many things at a time	3.79	0.86
6	I am determined	3.92	0.70
7	I can get through difficult times because I have had trouble before.	3.91	0.85
8	I have self-discipline	4.22	0.72
9	I keep interested in things	4.09	0.76
10	I can usually find something to laugh about	3.74	0.79
11	My belief in myself gets me through hard times	4.05	0.76
12	In an emergency, I'm someone people can generally rely on.	4.27	0.58
13	My life has meaning	4.42	0.68
14	When I'm in a difficult situation, I can usually find my way out of it	4.14	0.64
Total		56.79	5.95

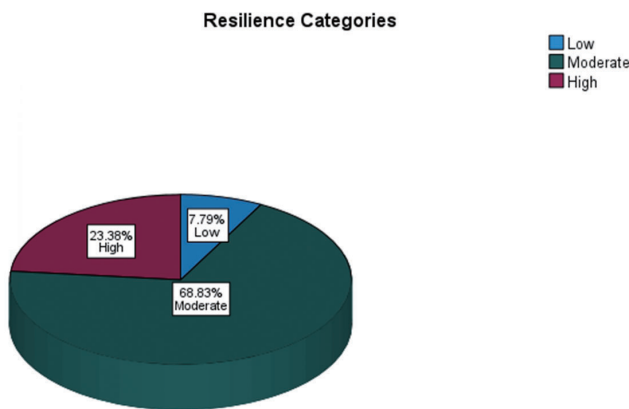


Figure 1. Work Hours per Week

Table 3. Distribution resilience level

No	Level	score	N	%
1	Low	14 to 48	6	7.8
2	Moderate	49 to 60	53	68.8
3	High	61 to 70	18	23.4

The study findings reported that there was no significant difference ($p > .05$) in the resilience level according to demographic characteristics such as age, gender, years of experience, income, type of hospital where they are working in, nationality, and work shifts, it is in contrast to Nurse-Clarke

and Sockol (2022)^[28] study, who conducted a correlational study utilizing an online survey to investigate the parameters associated with resilience among nurse faculty members within the COVID-19 epidemic. Correlational analyses were employed to ascertain the association between different notions of resilience and specific demographic characteristics which revealed that there was a significant positive correlation between resilience and age ($< .001$), as well as between resilience and experience teaching online ($p < .001$). Additionally, it was found that greater levels of resilience were connected with participation in professional development activities related to online teaching ($M = 80.7, SD = 11.0$), $t(276) = 2.41, p = .017$. The potential of resilience and its associated features to aid nurse educators in effectively responding to challenging conditions is evident. The development of programs aimed at enhancing or cultivating resilience among nurse educators is of utmost importance for schools of nursing. The provision of support and training in the field of online education is of utmost significance, also, to Albaqawi and Sanat Alrashidi (2022)^[24] study, who revealed a statistically significant association between gender and moral resilience ($p < .25$).

5. CONCLUSION

The nurse educators' resilience is so crucial to be implemented among nurse educators in all hospitals of the King-

dom of Saudi Arabia, this study concluded that resilience score was moderately and needed to be raises by some modifications in the hospitals infra structure, in addition to lacking the relationship among demographic characteristics and the resilience score.

Table 4. Difference in the resilience level according to demographic characteristics

No	Variables	Categories	means	Test	Statistics	p-value
1	Gender	Male	58.67	Independent sample <i>t</i> test	0.554	.581
		Female	56.72			
2	Age	Less than 30 years	56.23	ANOVA	1.586	.212
		From 30 to 40 years	56.46			
		More than 40 years	60.57			
3	Marital status	Single	56	Independent sample <i>t</i> test	-.554	.585
		Married	57.07			
4	Years of experience	Less than 4 years	54.93	ANOVA	1.395	.254
		From 4 to 15 years	56.87			
		More than 15 years	59			
5	Work place	Al-OMRAN Hospital	56.5	ANOVA	1.285	.284
		KFGH	59.33			
		KFHH	57.17			
		MCH	58.14			
		PSBIH	54.45			
6	Level of education	Diploma	57.05	ANOVA	2.374	.100
		Baccalaureate	55.13			
		Master	60			
7	Nationality	Saudi	55.98	Independent sample <i>t</i> test	-1.602	.113
		Non-Saudi	58.21			
8	Income	Less than 10,000 SR	57.5	ANOVA	1.581	.213
		From 10,000 to 20,000 SR	56.58			
		More than 20,000 SR	50			
9	Work shift	Day	57.16	Independent sample <i>t</i> test	1.065	.2910
		Shift	55.86			

Recommendations

It is recommended that to:

- More training sessions for nurse educators to enhance resilience is a must in the healthcare settings.
- Conducting other studies with larger sample size and with more demographic variables to be studied.
- Performing this study on other regions in Saudi Arabia must be considered to widen the resilience impacts and factors affecting it.
- Further research is required to examine the correlation between resilience scores, perceived well-being, willingness to care, and the future academic achievements of nursing students in the Kingdom of Saudi Arabia (KSA).

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AUTHORS CONTRIBUTIONS

RN.Fatimah Sharidah AlHassan were responsible for study design and revising. RN. Aisha Sharidah AlHassan was

responsible for data collection. RN. Fatimah Mohammed AlRadi drafted the manuscript and Dr. Abeer Abdelkader revised it. All authors read and approved the final manuscript. In this paragraph, also explain any special agreements concerning authorship, such as if authors contributed equally to the study.

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DATA SHARING STATEMENT

No additional data are available.

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