Level of Professionalism and Associated Factors Among Nurses Working in South Wollo Zone Public Hospitals, Northeastern Ethiopia, 2022

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Abstract

Introduction: Nurses are the frontline force for patient care, and nursing professionalism is a key tool for quality of care. Nursing professionalism and its characteristics should be defined in accordance with the current system.

Objective: To determine the level of professionalism in nursing and its associated factors in the South Wollo Public Hospital, Northeast Ethiopia.

Methods: A multicenter hospital-based cross-sectional study design was used in South Wollo Zone Public Hospitals from March to April 2022, with 357 nurses selected using a simple random sampling method. Data were collected using a pretested questionnaire, then entered and analyzed using EpiData 4.7 and SPSS 26. Finally, predictors of nursing professionalism were identified using a multivariate logistic regression.

Result: Of the 350 respondents, 179 (51.1%) were women and 171 (48.9%) were men, with 68.6% displaying high levels of professionalism. Being women (adjusted odds ratio [AOR] = 2.93, 95% CI [1.718, 5.000]), having a positive self-image (AOR = 2.96, 95% CI [1.421, 6.205]), having a good organizational culture (AOR = 3.16, 95% CI [1.587, 6.302]), being a member of the nursing association (AOR = 1.95, 95% CI [1.137, 3.367]), and nurses who were satisfied with their job were significantly associated with nursing professionalism.

Conclusion: In this study, the level of nursing professionalism was encouraging but needed more effort. Furthermore, sex, self-image, organizational culture, nursing association membership, and job satisfaction were positive predictors of nursing professionalism. As a result, hospital administrations consider factors that maintain a pleasant institutional working environment to foster a positive self-image and increase job satisfaction.

Keywords

nursing professionalism, self-image, organizational culture, South Wollo

Introduction

Nurses are the backbone of the global healthcare system, and professionalism in nursing is a basic and fundamental concept that benefits patients, organizations, and individuals (De Braganca & Nirmala, 2017; Solomon et al., 2015). The nursing profession is highly stressful, and nurses are prone to burnout due to the nature and emotional demands of their jobs (De Braganca & Nirmala, 2017). As a result, the demand for nursing professionalization has increased in recent years, and nurses worldwide have sought to determine whether professionalism exists in nursing (De Braganca & Nirmala, 2017; Gizaw et al., 2016).

Professionalism is defined as the conduct, goals, or qualities that define a profession or a professional person (Merriam-Webster Dictionary, 2010). It is a conceptualization of the duties, qualities, interrelationships, perceptions,

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autonomy, innovative thinking, and positional behavior patterns needed by professionals in their connections with individuals and society in general (Oweis, 2005; Shamian & El-Jardali, 2007; Swisher et al., 2004).

The American Nurses Association identified six key characteristics of nursing professionalism: providing standard care, involvement in leadership roles, evidence-based practice, conducting research, and taking an active role in advocacy (ANA, 2010). Nursing professionalism is essential for achieving the major goals of any healthcare delivery setting, including providing quality care, increasing patient satisfaction, improving the public image, and meeting health-related indicators, as well as fostering effective team collaboration, optimal patient outcomes, and job satisfaction (Shohani & Zamanzadeh, 2017). As a result, nurses who prioritize professionalism demonstrated both adherence to exercise standards and technical (skill-related) competence (Gunther & Alligood, 2002).

Professionalism in nursing has been shown to improve patient health outcomes and satisfaction, and as a result, nurses' performance and job satisfaction improved (Kim et al., 2017). A lack of professionalism, on the other hand, can erode trust between professionals and clients, reducing professional reputability and potentially leading to a loss of self-regulation, and it has also been linked to negative outcomes such as increased turnover and attrition as well as lower productivity (Wune et al., 2020).

Although the emphasis in the current world is on providing quality care, nursing professionalism faces a number of challenges, including rapid changes in nursing practice, membership, communication, population diversity, insufficient leadership skills, lack of self-determination, healthcare risks, long working hours, sentimental load, lack of appreciation by society, scarcity of nurses, and restricted job advancement (De Braganca & Nirmala, 2017).

Nevertheless, over the last decade, the Ethiopian Federal Ministry of Health (FMOH) has implemented reforms to boost nursing professionalism across the country, such as the Patient Compassionate, Respectful, and Caring initiative, the national dress code, the development of national standards for quality improvement in nursing services and audit tools, continued professional development, and competence testing. Nursing and nurse training in a variety of specialties have also been provided (FMOH, 2016a, 2016b; Wudu, 2021).

Outside of Ethiopia, several studies on nursing professionalism have been conducted (Dikmen et al., 2016; Jang et al., 2016); however, studies reported in Ethiopia have been few, only in the southwest district, outdated, and documentation is scarce, particularly in the study area. Therefore, this study aimed to fill a knowledge gap regarding the level of nursing professionalism and associated factors in public hospitals in northeastern Ethiopia. Consequently, hospital managers, nursing managers, nursing associations, and educational institutions are better able to improve and support nursing professionalism at the desired level.

Literature Review

Globally dramatic changes in current societal moral codes have caused nursing to face more ethical and philosophical difficulties when providing care to its patients and clients. Such improvements also resulted in the creation of current nursing situations that necessitate professional nursing. As a result, the description of nursing professionalism as well as its qualities must be clearly stated and suited to responding to rapid changes (Eid et al., 2018).

Research done in the United States discovered that their mean total score was 16.7, making them the most professional of any team evaluated with the Professionalism in Nursing Inventory. Acquired competence, education, and theory application were the three most important criteria for rating registered nurses. Publication and research received the lowest class rating (Malizia, 2000). According to a study conducted in Turkey, nurses with a baccalaureate degree or higher made up 79.5% of the respondents, indicating that a lack of educational preparation is associated with low mean total results of nursing professionalism (Dikmen et al., 2016). Furthermore, a national survey-based study done in Japan revealed that nurses had a low level of professionalism. The greatest score was obtained in competence and continuing education, and the minimum was in publication and communication (Tanaka et al., 2014). Besides, nursing professionalism was rated relatively low (5.67 ± 3.01) in a study conducted in a public hospital in Rizhao, China. The highest score was for continuing education (1.99 ± 0.98), while the lowest was for autonomy and research (0.11 ± 0.05; Yang et al., 2016). Studies in southwest Ethiopia showed that a high level of nursing professionalism was attained by 88 (30.3%) and 114 (36%; Gizaw et al., 2016; Solomon et al., 2015).

Numerous studies have found that sociodemographic factors, personal factors, and organizational culture are predictors of nursing professionalism (Dikmen et al., 2016; Fantahun et al., 2014; Gizaw et al., 2016; Kavaklı & Arslan, 2014; Munyewende et al., 2014; Solomon et al., 2015). A study in Turkey revealed that a higher level of nursing professionalism had an association with the qualifications and work experience of nurses (Dikmen et al., 2016). Besides, a study in Japan indicated that nursing professionalism was associated with work experience, qualifications, and current position (Tanaka et al., 2014). Furthermore, there was a strong association between nursing professionalism and qualification (Jang et al., 2016) in the China study. A study in southwest Ethiopia revealed that nursing professionalism was associated with qualifications, gender, marital status, self-image, and organizational culture (Gizaw et al., 2016; Solomon et al., 2015).

Assuring nursing professionalism is a means of improving care quality. As a result of providing quality care, patient and nurse job satisfaction increased, while also fostering a positive self- and organizational image. This, in turn, leads to

social recognition, and the existence of nursing professionalism will no longer be a concern. Therefore, this study attempted to assess the level of professionalism and associated factors among nurses working in South Wollo Zone Public Hospitals.

Methods

Study Design and Period

A multicenter hospital-based cross-sectional study design was employed in the South Wollo Zone in northeastern Ethiopia from March 2022 to April 2022. There are 14 government hospitals with 1,150 nurses overall, one comprehensive and specialized hospital with specialist care, and three more private general hospitals. However, the public hospitals in this zone are estimated to provide for 5 million people.

Inclusion and Exclusion Criteria

The study included all nurses who had worked in hospitals for at least 6 months; however, it did not include nurses who were unavailable or on yearly leave at the time the data were collected.

Sampling Size and Procedure

Using a single population proportion formula and taking into account the following assumptions, the sample size was calculated: at Jimma Zone Public Hospitals, the proportion of nurses with a high degree of professionalism was 30.3% (Solomon et al., 2015), with a 95% level of confidence and a 5% margin of error. By including a 10% nonresponse rate, the total sample size increased to 357. Thirteen government hospitals were chosen from a list of all the government hospitals in the South Wollo Zone, and all of them were included in the study. Samples were then distributed among the hospitals using proportional allocation. Simple random sampling was performed to choose the final study participants from the prepared sampling frame once the sample size had been established.

Data Collection Technique and Instrument

A self-administered questionnaire was used to collect data and had five sections.

Section one: respondent characteristics (age, gender, marital status, qualification, salary, job position, length of service, type of college, etc.).

Section two: The questionnaire was based on the Registered Nurses Association of Ontario (RNAO) guideline, which includes Likert scale questions written in English and was validated by experts in the field as well as in our country, and it served as the basis for the questionnaire (Fantahun et al., 2014; Solomon et al., 2015). This study included a pretest

(α=.831). An evaluation of 34 items on a five-point Likert scale was used to calculate the professionalism score for nurses. Each respondent may receive a score between 34 (totally unprofessional) and 170 (entirely professional), and the overall score is divided by 5 to represent the level of professionalism.

Section three: The level of self-image has five items that assess professional self-image and is scored using a five-point Likert scale. This was adopted from Dorothee L. Hampton and Gerald M. Hampton and had a reliability rating of 0.732 in Jimma Zone, southwestern Ethiopia (Solomon et al., 2015) and (α=.843) in this study.

Section four: The Minnesota Satisfaction Questionnaire (MSQ) was used to assess job satisfaction, and it has a total of 20 items on a five-point Likert scale that is used to calculate a total score for job satisfaction and had (reliability = 0.943) in Japan (Tanaka et al., 2014) and (α=.853) in this study.

Section five: organizational cultures were adapted from the Nursing Assessment Survey (NAS), revised, and used by Jimma Zone Public Hospital; it consists of 14 items on a five-point Likert scale ranging from strongly disagreeing (1 point) to strongly agreeing (5 points, α=.838; Solomon et al., 2015).

Operational Definition

High Nursing Professionalism: Participants who scored equal to the mean or more with the RNAO tool (Solomon et al., 2015).

Low Nursing Professionalism: Participants who scored less than the mean with the RNAO tool (Solomon et al., 2015).

Participants who scored at or above the mean on Dorothee L. Hampton and Gerald M. Hampton's tool had a positive self-image, and the counterpart was considered to have a negative self-image (Gizaw et al., 2016).

Job Satisfaction: Participants who achieved mean or above mean scores on the Minnesota Satisfaction Questionnaire were considered satisfied with their jobs, while those who scored less than the mean on the MSQ were considered unsatisfied (Tanaka et al., 2014).

Good Organizational Culture: Nurses who scored at or above the mean on the NAS tool (Solomon et al., 2015).

Poor Organizational Culture: Nurses who scored less than the mean with the NAS tool (Solomon et al., 2015).

Statistical Analysis and Data Quality Management

The tool has been translated into the local Amharic language. Thirteen data collectors and four supervisors were trained, and a pretest of 5% of the sample size was conducted. The data was cleaned, encoded, and entered into EpiData software version 4.7 before being exported to SPSS version 26 for analysis. The level of professionalism was calculated and assessed using descriptive statistics. A bivariable logistic

regression analysis was performed to select variables for multivariable analysis. Then, after doing a multivariable analysis, a variable was deemed statistically significant if its *p*-value was <.05. The adjusted odds ratio (OR) with its 95% confidence interval (CI) was used to demonstrate the strength of association between each explanatory variable and the outcome variable.

Result

Of the total 357 selected study subjects, 350 respondents were enrolled, making the response rate 98%.

Sociodemographic Properties of the Study Subject

The respondents' mean age was 31.02 (standard deviation [*SD*] ± 6.52) years, and 173 (49.4%) of them were between the ages of 20 and 29. Women made up approximately 179 (51.1%) of the total participants. The vast majority of participants (252; 72%) were nursing BSc holders, and about 185 (52.9%) of them were married (Table 1).

Self and Organizational-Related Properties of the Respondents

The majority of respondents (300, 85.7%) were happy with their jobs, 233 (66.6%) had a positive self-image, and 299 (83.4%) had a good organizational culture (Figure 1).

Experience-Related Characteristics

In terms of the positions that respondents presently hold at the hospital, 303 of them (86.6%) were staff nurses.

Table 1. Sociodemographic Properties of Nurses in South Wollo Zone Public Hospitals, Northeastern, Ethiopia, 2022 (*n* = 350).

Variables	Category	Frequency	Percentage
Sex	Male	171	48.9%
	Female	179	51.1%
Age in year	18–29	173	49.4%
	30–39	145	41.4%
	≥40	32	9.1%
Marital status	Married	185	52.9%
	Single	131	37.4%
	Divorced	31	8.9%
	Widowed	3	0.9%
Monthly income (Birr)	<5,000	33	9.4%
	5,000–7,000	113	32.3%
	7,000–10,000	165	47.1%
	>10,000	39	11.1%
Educational qualification	Diploma	87	24.9%
	BSc	252	72.0%
	MSc	11	3.1%

Regarding work experience, respondents' employment histories ranged from 6 months to 37 years, with a mean of 6.79 ± 5.45 years, and 304 (86.1%) of them held jobs for at least 10 years (Table 2).

Level of Professionalism in Nursing

Of the total respondents, 240 (68.6%) scored at a high level of professionalism and 110 (31.4%) of the nurses scored at a low level of professionalism. The respondents' mean nursing professionalism score was 22.35 ± 5.06 *SD*.

### Factors Associated With Nursing Professionalism

Only five variables (sex, self-image, organizational culture, nursing association membership, and job satisfaction) were found to be significantly associated with the level of professionalism after entering them into a multivariable logistic regression. Women nurses were about three times more likely to have high professionalism when compared with male nurses (adjusted OR [AOR] = 2.93, 95% CI [1.718, 5.000]).

Nurses who have a positive self-image are about two times more likely to have high professionalism when compared with nurses who have a negative one (AOR = 2.96, 95% CI [1.421, 6.205]). Nurses who had good organizational culture were three times more likely to have high professionalism than those who had poor organizational culture (AOR = 3.16, 95% CI [1.587, 6.302]). In addition, nurses who are members of nursing associations were two times more likely to have a higher level of professionalism when compared to nonmembers (AOR = 1.95, 95% CI [1.137, 3.367]). Similarly, nurses who were satisfied with their job were at least two times more likely to have high professionalism when compared with those who were dissatisfied (AOR = 2.03, 95% CI [1.193, 3.475]; Table 3).

Discussion

According to the study, the proportion of nurses with a high level of professionalism does imply that more effort is needed. Furthermore, the gender of nurses, having a positive self-image, having a good organizational culture, and having job satisfaction were predictors of nursing professionalism.

Previous research at Jimma Public Hospitals (Gizaw et al., 2016; Solomon et al., 2015) and with Japanese nurses (Tanaka et al., 2014) found that they have a slightly lower level of professionalism than the current study. The differences might be due to methodological differences, like the operational definition of nursing professionalism. The above-mentioned studies classified the level of nursing professionalism into three classes: high, moderate, and low. When we compare the high level of professionalism with the current study, it seems slightly lower, but in the current study, high and moderate classifications were considered (above the
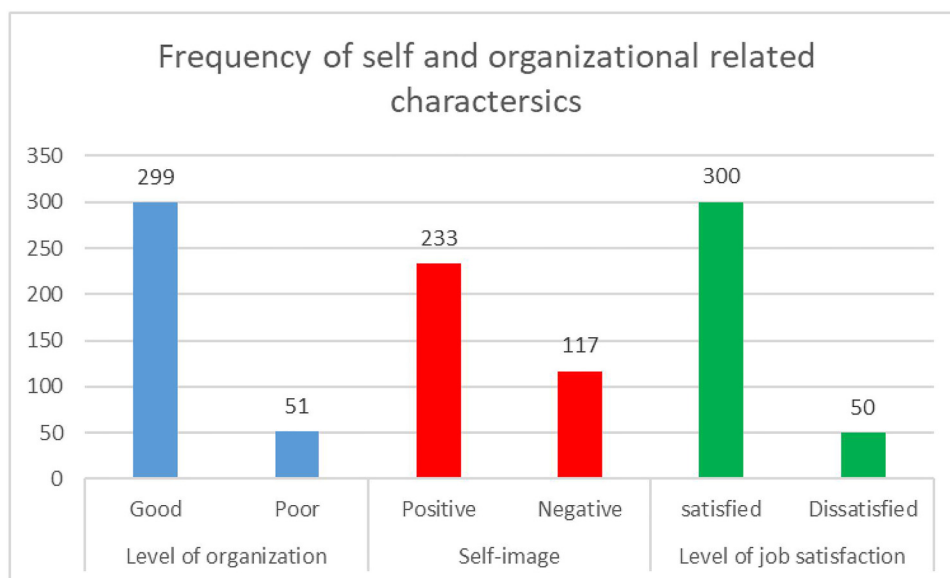
Figure 1. Frequency of self- and organizational-related characteristics among nurses in South Wollo Zone Public Hospitals, northeastern Ethiopia, 2022.

Table 2. Experience-Related Characteristics of Nurses Working in South Wollo Zone Public Hospitals, Northeastern Ethiopia, 2022 ($n = 350$).

Variables	Category	Frequency	Percentage
Current position	Staff Nurse	303	86.6%
	Head Nurse	38	10.9%
	Matron Nurse	9	2.6%
Degree issued	Governmental College	253	72.3%
	Private College	97	27.7%
Ethiopian nursing association membership	Yes	183	52.3%
	No	167	47.7%
Work experience	≤10 years	304	86.9%
	11–20 years	33	9.4%
	>20 years	13	3.7%
Unit experience	<2	213	60.9%
	≥2	137	39.1%

mean score) as high classifications. However, when adding the above-mentioned studies' high and moderate levels of professionalism as "high levels of professionalism," the level of professionalism is consistent with the current study. This implies that more effort is needed to improve the level of professionalism in both current and previous studies.

In this study, the gender of the nurse was discovered to be an important factor in determining the level of nursing professionalism. Women nurses were approximately three times more likely than male nurses to have a high level of professionalism. This finding contradicts a study conducted

in Jimma Zone Public Hospitals in the southwest of Ethiopia, which found that men were more likely than women to have a high level of nursing professionalism (Solomon et al., 2015). This disparity could be attributed to participant characteristics such as professional qualification, age, educational attainment location, and study period. Furthermore, a study conducted in Japan (Tanaka et al., 2014) found that sex has no significant relationship with nursing professionalism level, which is in contrast with the current study. This could be attributed to the ongoing training provided to both men and women employees, as well as to organizational culture and working conditions. As a result, gender has no effect on professionalism.

Similarly, in this study, the nurse's self-image was also an important predictor of the level of nursing professionalism. Nurses with a positive self-image were twice as likely as those with a negative one to have a high level of professionalism. This is consistent with the findings of the Jimma Zone Public Hospitals (Solomon et al., 2015). In contrast to the current study, a study conducted at Mekelle Hospital (Fantahun et al., 2014) and Japan (Tanaka et al., 2014) discovered that self-image has no significant relationship with nursing professionalism level. This result demonstrated that how we think about ourselves, see ourselves, and present ourselves to others can all help to improve our level of professionalism. This implies that having a positive professional self-image is key for nurses to develop their professional identity, which promotes professionalism. Therefore, nurse managers and hospital managers need to consider factors that contribute to a positive self-image.

The current study findings, on the other hand, show that nurses who were satisfied with their jobs were twice as

Table 3. Bivariable and Multivariable Analysis for Factors Associated With Level of Nursing Professionalism in South Wollo Zone Public Hospitals, Northeastern Ethiopia, 2022 ($n = 350$).

Variable	Category	Professionalism		Odds ratio		P-value
		Low	High	COR	AOR	
Sex	Male	74	97	1	1	1
	Female	36	143	3.03 (1.886, 4.870) *	2.93 (1.718, 5.000) **	.000
Position	Staff Nurse	214	89	1.92 (0.505, 7.33)	1.01 (0.196, 5.256)	.222
	Head Nurse	21	17	0.98 (0.229, 4.264)	0.51 (0.085, 3.064)	.986
	Matron Nurse	5	4	1	1	1
Self- image	Negative	31	19	1	1	1
	Positive	79	221	4.56 (2.440, 8.537) *	2.96 (1.421, 6.205) **	.004
Experience	≤10	204	100	0.61 (0.165, 2.273)	1.20 (0.304, 4.749)	.794
	11–20	26	7	1.11 (0.240, 5.180)	2.03 (0.400, 10.37)	.391
	>20	10	3	1	1	1
Organizational culture	Poor	36	22	1	1	1
	Good	74	218	4.82 (2.666, 8.717) *	3.16 (1.587, 6.302) **	.001
Nursing association membership	Yes	64	119	1.41 (1.67, 2.231) *	1.95 (1.137, 3.367) **	.015
	No	46	121	1	1	1
Degree issued	Governmental health college	35	62	1.34 (0.817, 2.197)	1.81 (0.971.012, 3.239)	.051
	Private health science college	75	178	1	1	1
Job satisfaction	Dissatisfied	56	61	1	1	1
	Satisfied	54	179	3.04 (1.895, 4.886) *	2.03 (1.193, 3.475) **	.009

Note. COR = crude odds ratio; AOR = adjusted odds ratio. *Stands for statistically significant at $p < .05$ in COR and **stands for statistically significant at $p < .05$ in AOR.

likely to have a high level of professionalism as those who were dissatisfied with their jobs. This finding is consistent with studies done in the Jimma Zone (Gizaw et al., 2016) as well as among Chinese and Korean nurses (Hwang et al., 2009). This implies that hospital and nursing managers identify factors that increase job satisfaction, which motivates higher levels of professional commitment and, as a result, raises the desired level of nursing professionalism.

Furthermore, nurses with a positive organizational culture were about three times more likely to be professionals than those with a negative organizational culture. This finding is consistent with a study conducted at Jimma Zone Public Hospitals (Solomon et al., 2015). This could be because if the hospital encourages people to try new things, if each individual worker is respected, if the employees here trust one another, and if competition among different work groups in this hospital is actively encouraged, the level of professionalism will rise. As a result, hospital administrators consider factors that contribute to a positive organizational trend and, ultimately, a recognition system for professionalism in practice.

Strengths and Limitations

The researchers used the Switchboard, a peer-reviewed and validated survey tool, and worked with more than 13 public hospitals. However, this study may have methodological flaws, such as a self-administered questionnaire, which may lead to respondent bias through overestimation or underestimation of the result. Furthermore, due to the nature of the study design, we were unable to establish a causal relationship.

Therefore, conducting observational-based follow-up studies and qualitative studies will address the current study's limitations.

Implication for Practice

Possessing a positive self-image, having a good organizational culture, and increasing job satisfaction will strengthen the high level of nursing professionalism. As a result, the quality of care will improve, and societal recognition will follow.

Conclusion

In this study, the level of nursing professionalism was encouraging but needed more effort. Furthermore, being women, having association membership, having a positive self-image, having a good organizational culture, and having job satisfaction were predictors of nursing professionalism. Therefore, hospital administrators must create a motivating and pleasant working environment that values all contributions while also creating a competitive organizational culture that improves professionalism and commitment. They should also develop various training programs for men nurses, as well as encouraging environments for achieving higher levels of professionalism. Furthermore, nursing managers, nursing in-service training institutions, and the nursing association should all contribute to the development of a positive self-image in nurses as a reflection of their professional identity, and the nursing association, in particular, should increase new

membership enrolment and take the lead in enhancing capacity-building activities for professionalism among its membership.

Author Contributions

The authors made valuable contributions to proposal writing, data collection, processing, analysis, and interpretation. The principal investigator and correspondent author, in particular, played an important role in manuscript writing, skeptically revising it for important academic subject matter, journal submission, providing official approval, and agreeing to be responsible for all aspects of the process.

Data Accessibility

Any data produced or reviewed as part of this study are included in the manuscript and are also readily accessible to the corresponding author.

Declaration of Conflicting Interests

The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Research Ethics and Patient Consent

Wollo University College of Medicine and Health Science vetted and approved the study procedures (WU/CMHS/789/2022), and ethical approval was obtained. Government hospitals in eastern Amhara also provided explicit consent letters. Having fully understood the purpose of the study, each respondent provided written consent prior to the interview. In addition, the study was carried out in line with the Declaration of Helsinki. Recalcitrant study participants were excluded from the survey. Anonymized data was collected, and participant information was kept confidential.

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