

Health Promotion Behaviors as Determinants of Health Status among Public School Teachers

Rowell Bernard T. Dawat, RN, LPT, MSN, MSpEd

College of Nursing – Graduate School, Cebu Normal University, Cebu City, Cebu, Philippines 6000

Email address: rbdawat.pna@gmail.com/ main.12001950@cnu.edu.ph

Abstract— This study examined health promotion behaviors as determinants of health status among 180 public school teachers in the Department of Education, Cebu City Division using a descriptive–correlational design. Data were gathered through a researcher-made questionnaire and standardized tools, and analyzed using descriptive and inferential statistics. Findings revealed that 93.89% of the respondents were classified as healthy, while 6.11% were unhealthy. Among personal factors, only the nature of work significantly correlated with health status. In terms of health promotion behaviors, stress reduction and health maintenance practices showed significant associations, while cognitive variables such as perceived benefits of action and self-efficacy also demonstrated significant relationships. These results affirm Pender's Health Promotion Model and emphasize the importance of strengthening workplace wellness programs to promote health among public school teachers.

Keywords— Health promotion behaviors, Health status, Public school teachers, Pender's Health Promotion Model, Stress reduction, Self-efficacy

I. INTRODUCTION

Health is a dynamic state shaped by biological, psychological, sociocultural, and behavioral factors, alongside environmental conditions. The presence of diseases significantly impacts one's overall well-being. The top 10 major causes of morbidity and mortality worldwide include heart disease, stroke, chronic obstructive pulmonary disease, lower respiratory infections, Alzheimer's disease, and others. tuberculosis, diabetes mellitus, diarrheal disorders, cancers, and dementias (WHO, 2020). In response to these challenges, identification, early detection, and prompt intervention remain essential in preventing, managing, and reducing the burden of disease (National Library of Medicine, 2021).

Beyond medical conditions, lifestyle and health promotion behaviors are critical determinants of health. Daily practices such as proper diet, regular physical activity, stress management, and adherence to preventive measures significantly influence health outcomes and longevity. Globally, life expectancy has increased from 73.4 years in 2019 (WHO, 2020) to 73.3 years in 2024 (Ageing: Global Population, 2024), highlighting how individual behaviors and socioeconomic circumstances play a major role in shaping health trajectories (Basaraba, 2022).

For teachers, who are regarded as role models and nation-builders, engaging in health-promoting behaviors is both a personal and professional responsibility. However, the teaching profession is recognized as one of the most stressful, with teachers experiencing higher occupational stress

compared to many other professions. Kabito and Wami (2020) reported that 58.2% of teachers suffer from minor psychiatric disorders associated with job-related stress. Such pressures not only threaten their health status but also influence their ability to practice consistent health promotion behaviors.

For teachers, who serve as role models and nation-builders, maintaining health is both a personal and professional responsibility. However, their work environment exposes them to unique stressors. The teaching profession is recognized as highly demanding, with teachers experiencing greater levels of occupational stress compared to other professions. According to a study by Kabito and Wami (2020), about 58.2% of teachers experienced mild mental health issues related to work-related stress. This highlights how occupational pressures can predispose teachers to health risks, especially when coupled with inadequate coping strategies.

In the Philippines, health-related concerns among teachers remain pressing. Reports of illnesses, deaths, and even suicides among educators have heightened public attention (Nightingale, 2022). Despite institutional measures such as medical and psychological assessments, annual health check-ups, and access to school-based health personnel, barriers to healthcare persist. These include financial limitations, geographic inaccessibility, transportation challenges, and cultural reliance on traditional healers. The pressing necessity to investigate how health promotion actions affect the general health of public school instructors is highlighted by these facts.

Recognizing these challenges, the researcher as a nurse with a background in medical-surgical nursing recognizes that teachers may be predisposed to certain health risk behaviors and conditions. The researcher seeks to identify the biological, psychological, sociocultural, and behavioral factors that shape teachers' health. By focusing on health promotion behaviors as determinants of health status, this study aims to provide insights that will guide the development of targeted strategies to strengthen the well-being of public school teachers.

Purpose of the Study

This study aims to determine how health promotion behaviors serve as determinants of health status among public school teachers in the Department of Education.

Specifically, the research aims to answer the following questions:

1. What are the personal factors of the respondents in terms of biological, psychological, and sociocultural aspects?
2. What is the health status of the respondents?

3. What is the significant relationship between the personal factors of the respondents and their health status?
4. What is the significant relationship between prior health-related behaviors and health status?
5. What is the significant relationship between specific cognitions and affect (such as perceived benefits of action and self-efficacy) and health status?

II. METHODOLOGY

This section covers the methodological details of the study which included the research design, respondents, research sampling and sampling technique, instrument, data gathering procedures, ethical considerations, and statistical treatment of the data.

Research Design

This study employed a descriptive–correlational research design, which was appropriate since the objective was to examine the relationship of various factors with the health status of respondents without manipulating the variables. The descriptive component enabled the researcher to profile the respondents in terms of their personal factors, prior health-related behaviors, and behavior-specific cognitions and affect. Meanwhile, the correlational component allowed for the identification of the strength and direction of associations between these variables and the teachers' overall health status. This design was deemed suitable as it provided both a systematic description of the respondents and empirical evidence on how health promotion behaviors are related to the health status of respondents within the natural context of their experiences.

Respondents

The survey participants consisted of 180 instructors from the Department of Education's recognized schools in the Cebu City Division. They are selected as the study respondents because they are licensed professional teacher, with regular-permanent employment status, with ancillary designations or functions, and with administrative functions by appointment.

Research Sample and Sampling Technique

G Power program was used to calculate the sample size. The program advised that correlational investigations have at least 177 participants, a statistical power of 85%, and a significance level of 0.05. To ensure adequacy, the sample was rounded to 180 respondents. Random sampling was then employed to select participants who satisfied the inclusion criteria. Eligible respondents were teachers with regular-permanent employment status in the Department of Education, regardless of gender, age, or length of service. An additional criterion was that they must not have been diagnosed with any psychiatric disorder at the time of the study. Recruitment was conducted based on willingness to participate, with informed consent obtained prior to data collection, and continued until the target sample size of 180 was achieved.

Research Instrument

The study utilized a combination of a researcher-developed questionnaire and standardized instruments to collect data. The researcher-made questionnaire addressed individual characteristics and experiences, as well as behavior-specific

cognitions and affect, focusing on demographic, biological, psychological, and sociocultural factors, along with prior health-related behaviors such as diet, exercise, and stress management. To complement this, two validated tools were employed: the Rapid Eating Assessment for Participants (REAP-S), which measures dietary practices and has demonstrated excellent test–retest reliability ($r = 0.86$, $p < 0.0001$), and the International Physical Activity Questionnaire–Long Form (IPAQ-Long), which assesses physical activity levels with a Cronbach's alpha of 0.73 and intraclass correlation coefficients of 0.65 for men and 0.57 for women. Both instruments have been validated with acceptable measurement properties for assessing dietary intake and physical activity. The researcher-made questionnaire was simplified, pretested, and refined to ensure comprehensibility, with respondent feedback incorporated to improve validity and reliability. It achieved a Cronbach's alpha of 0.809, with item reliability ranging from acceptable to excellent, confirming the instrument's internal consistency in measuring health-related constructs such as lifestyle practices, perceived benefits, barriers, and interpersonal and situational influences.

Data Gathering Procedures

Data collection was conducted in 2019, preceding to the beginning of the COVID-19 pandemic, and was implemented in several stages to ensure reliability, validity, and adherence to ethical standards. Initially, a pilot test was carried out to evaluate the reliability and validity of the research instrument, after which the study protocol was reviewed and approved by the Cebu Normal University Research Ethics Committee. Permission to conduct the study was then obtained from the Department of Education, Schools Division of Cebu City, followed by coordination with school principals in the identified sites for local approval. During data gathering, the researcher personally visited the schools, explained the study's purpose and procedures, secured informed consent, and emphasized the principles of voluntary participation, confidentiality, and respondent welfare. Teachers were allotted 30–45 minutes to complete the questionnaire in a manner that minimized disruption to classes, with principals assisting in the collection of any unfinished forms when necessary. All completed questionnaires were retrieved by the researcher, checked for completeness, and subsequently tallied and encoded into SPSS. Statistical analyses, including correlational tests, were then performed with the guidance of a statistician.

Ethical Considerations

The study underwent a comprehensive ethical review to ensure compliance with established research standards and the protection of human dignity. Approval was granted by the Cebu Normal University Research Ethics Committee, after which the research instrument was validated. Permissions to conduct the study were secured through formal transmittal letters addressed to the Department of Education Schools Division of Cebu City, the District Supervisor, and the principals of the participating schools. During data collection, respondents were provided with detailed information regarding the purpose and procedures of the study, and written informed consent was obtained. Participation was strictly

voluntary, with the right to withdraw at any stage without repercussions. Confidentiality and anonymity were safeguarded by assigning number codes instead of names, while privacy was ensured during questionnaire administration. Participants were informed of the minimal risks involved, such as possible discomfort in answering personal questions, and were allotted 30–40 minutes to complete the instrument. The study emphasized ethical protection of participants throughout the process and sought to generate evidence that could support health education, policy development, and nursing practice.

Statistical Treatment

The study employed both descriptive and inferential statistics to analyze data from 180 public school teachers. Descriptive statistics, including frequency counts and percentages, were used to summarize personal factors, while weighted means and standard deviations assessed prior health-related behaviors and behavior-specific cognitions. Cross-tabulation described associations between demographic variables and health status. For inferential analysis, point-biserial correlation was applied to identify significant relationships between health outcomes and factors such as nature of work, stress reduction practices, health maintenance behaviors, perceived benefits of action, and self-efficacy. These analyses align with Pender’s Health Promotion Model, highlighting the important role of individual behaviors and cognitions in influencing the health status of public school teachers.

III. RESULTS

This chapter presents the collected data and findings addressing the study’s research questions, illustrated through tables and figures. It is organized into sections on personal factors, prior health-related behaviors, behavior-specific cognitions and affect, overall health status, and factors significantly associated with health status. Key findings on how health promotion behaviors relate to the health status of respondents are highlighted.

Profile and Characteristics of the Respondents

This section depicts the profile of the respondents and their individual characteristics and experiences were categorized into personal factors: biological, psychological, and sociocultural and prior related behaviors.

TABLE 1. Personal Factors of the Respondents

Biological Factors	Categories	f	%
Age	21-30	39	21.7
	31-40	61	33.9
	41-50	47	26.1
	51-60	31	17.2
	61-above	2	1.1
Sex	Male	38	21.1
	Female	142	78.9
Medical Conditions Experienced	Without Illness	95	52.78
	With Illness	85	47.22
Number of Illnesses	Three Illnesses	5	5.9
	Two Illnesses	20	23.5
	One Illness	60	70.6
Types of Illnesses	Hypertension	49	57.6
	Arthritis	23	27.1
	Diabetes	13	15.3

	Asthma	7	8.2
	Coronary Heart Disease	5	5.9
	Kidney	3	3.5
	*Others	16	18.82

*Endometriosis, Scoliosis, Breast Tumor, Appendicitis, Lipidemia, Ovarian Cyst, PCOS, Allergic rhinitis, Vertigo, Thyroid Problem, Polycystic Ovary, Anemia, Allergy, Gastric Ulcer, Cholelithiasis, Ovarian Cancer

Psychological Factors	Category	f	%
Educational Qualifications	Bachelor	29	16.1
	BS with MA units	11	9
	Master’s Degree	25	13.9
	MA with Doctoral Units	5	2.8
	Doctorate Degree	2	1.1
Nature of Work	Full time teaching	11	4
	with Ancillary Designation	61	33.9
	with Administrative Function	5	2.8
Mental Health Conditions Experienced	With Mental Health Conditions	63	35
	W/out Mental Health Conditions	11	7
	Mental Illness	11	17.5
	Anxiety	7	11.1
	Depression	7	11.1
	Stress	57	90.5

*Multiple entry: Out of 63 respondents with mental health conditions have two or more mental illness

Socio Cultural Factors	Category	f	%
Civil Status	Single	56	31.1
	Married	117	65.0
	Widow	6	3.3
Income	less than 20K	4	2.2
	20-21K	49	27.2
	22-23K	33	18.3
	24-39K	83	46.1
	40-44K	11	6.1
Housing Location	Rural	34	18.9
	Urban	146	81.1
Living Conditions	Alone	21	11.7
	Own family	99	55.0
	With Parents	60	33.3
Number of Household Members	only one member	21	11.7
	2 to 4	82	45.6
	5 to 7	66	36.7
	8 to 10	6	3.3
	11-above	5	2.8
Health Insurance	PhilHealth only	129	71.7
	PhilHealth with private	51	28.3

As shown in Table 1, the personal factors of the respondents were categorized into three subgroups: biological, psychological, and sociocultural. In terms of age, the majority belonged to the 31–40 age group, comprising 33.9% of the total population. This stage of development is characterized by maturity, responsibility, and a strong inclination toward nurturing and guiding the younger generation, particularly students, as described by Freud. Similarly, Piaget associates this stage with higher-order abstract thinking, while Kohlberg highlights an orientation toward social contracts and universal ethical principles, which are essential in making consistent and principled decisions (MSEd, 2025; Stanford Encyclopedia of Philosophy, 2021). These findings imply that respondents within this age range have not only attained the minimum academic requirements for teaching but also gained valuable

experience in both public and private schools, which supports their qualifications and ranking within the teaching profession.

With regard to sex, of the 180 respondents, 142 (78.9%) were female and 38 (21.1%) were male, indicating that the profession is largely female-dominated. Kardel et al. (2025) suggest that teaching is often perceived from a cultural perspective as a feminine role. Lazaridou (2024) further observed that while women dominate the teaching profession in terms of numbers, men are more likely to occupy higher leadership positions within educational institutions. This finding underscores that, despite ongoing efforts toward gender equality, more women continue to choose teaching as a profession. In early education in particular kindergarten and grade school female teachers remain central to shaping the development and upbringing of learners.

Health Status of the Teachers

Table 2 depicted the frequency distribution of the respondents’ general health status.

TABLE 2. Health Status of the Teachers

Level of Health Status	Frequency	Percent
Healthy	169	93.89
Unhealthy	11	6.11
Total	180	100.0

The study found that the majority of respondents were classified as healthy (93.89%), while only a small proportion (6.11%) were identified as unhealthy. This outcome supports the findings of Bocean and Vărzaru (2025), who emphasized that health status is a critical determinant of productivity and effectiveness, and Cruz et al. (2020), who underscored that health should be understood as a holistic condition encompassing physical, mental, and social well-being. The results imply that the respondents place considerable value on their health and experience relatively few health-related concerns. As public-school teachers, their ability to maintain good health not only enhances personal well-being but also strengthens their role as educators and role models. By exemplifying healthy practices and advocating health promotion, they contribute to sustaining their professional effectiveness while fostering a culture of wellness among their students and within the school community.

Personal Factors and Health Status

Table 3 reflects the findings on the health-related behavior of the respondents namely: dietary practices, alcohol intake and smoking, stress reduction activities, health maintenance practices and physical activities.

A point-biserial correlation was conducted to examine the relationship between age and health status, which revealed a negative but non-significant correlation. In contrast, the nature of work demonstrated a positive and statistically significant correlation with health status. The number of household members, however, showed a negative but non-significant relationship with health status. A Fisher’s exact test was applied to assess associations between categorical variables and health status. Results indicated no significant association between sex and health status, nor between civil status, housing location, health insurance, and living conditions with

health status. Similarly, Kendall’s tau-b correlation showed a weak negative but non-significant relationship between educational qualifications and health status, while income was likewise not significantly related.

TABLE 3. Significant Relationship between Personal Factors and Health Status

Variables	Value	P-value	Decision	Interpretation
Age	0.023	0.760	Failed to Reject	No Significant Relationship
Sex	-0.075	0.316	Failed to Reject	No Significant Relationship
Medical Conditions Experienced	-0.009	0.904	Failed to Reject	No Significant Relationship
Educational Qualifications	0.089	0.234	Failed to Reject	No Significant Relationship
Nature of Work	-0.156*	0.036	Reject	Significant Relationship
Mental Health Conditions Experienced	0.105	0.163	Failed to Reject	No Significant Relationship
Civil Status	-0.032	0.670	Failed to Reject	No Significant Relationship
Income	0.090	0.228	Failed to Reject	No Significant Relationship
Housing Location	0.005	0.944	Failed to Reject	No Significant Relationship
Living Conditions	-0.108	0.148	Failed to Reject	No Significant Relationship
Number of Household Members	-0.041	0.58	Failed to Reject	No Significant Relationship
Health Insurance	0.057	0.443	Failed to Reject	No Significant Relationship

Overall, the analysis revealed that among the twelve personal factors examined, only the nature of work showed a significant association with health status. Among the five variables under prior health-related behaviors, only two were significantly correlated with health status. These findings reinforce previous evidence that the nature of work is a critical determinant of health, influencing individuals holistically and potentially leading to adverse health outcomes when job demands are excessive (Shah et al., 2024). Tandan et al. (2024) likewise emphasized that work and health are interdependent: the quality of work influences health outcomes, while the health of individuals affects work performance. In this context, the respondents’ nature of work can either promote well-being or compromise it. Excessive workload, high stress, and demanding responsibilities may impair bodily functions, weaken the immune system, and increase susceptibility to both physical illnesses and mental health concerns.

Prior Health Related Behavior and Health Status

Table 4 presents the tabulated correlation of the respondent’s prior health related behavior and health status.

Stress reduction practices were found to have a significant association with the respondents’ health status (p = 0.03). Given that the respondents are professionals with foundational knowledge of stress and its effects, this finding highlights the importance of proactive stress management. Ghasemi et al. (2024) emphasized that structured planning of lifestyle and

health habits within stress reduction programs can effectively alleviate stress, while Bondarchuk et al. (2024) noted that individuals often struggle to address stress directly, leading to neglect and weakened coping mechanisms. The present study aligns with these findings, underscoring that stress reduction activities positively influence health status. For teachers, in particular, stressful workloads and demanding work environments may compromise overall well-being and performance, making stress management an essential component of health promotion.

TABLE 4. Significant Relationship between Prior Health Related Behavior and Health Status

Variables	Value	P-value	Decision	Interpretation
Dietary Practices	-0.056	0.457	Failed to Reject	No Significant Relationship
Physical Activity	-0.023	0.755	Failed to Reject	No Significant Relationship
Alcohol Intake and Smoking	0.081	0.280	Failed to Reject	No Significant Relationship
Stress Reduction Activities	0.175*	0.019	Reject	There is a significant Relationship
Health Maintenance Practices	0.139	0.064	Reject	There is a significant Relationship

Similarly, health maintenance practices were also found to be significantly associated with health status ($p = 0.064$). This result affirms previous literature suggesting that health maintenance is a holistic and multifactorial concept, encompassing a broad range of practices that require individuals to evaluate the outcomes of their actions (Christoforou et al., 2024; Tello, 2020). The findings imply that respondents actively engage in various health maintenance behaviors, although such practices may differ across individuals depending on their health conditions and specific needs. Overall, these results suggest that both stress reduction and health maintenance play vital roles in supporting teachers' health and well-being.

Specific Cognitions and Affect and Health Status

In table 5, the data revealed that among the six variables, two variables showed a significant association to the health status.

The results reveal a significant relationship between perceived benefits of action and health status. This finding aligns with Albarracin et al. (2024), who noted that inference influences an individual's ability to evaluate the relevance of a response based on acquired knowledge and anticipated outcomes. Similarly, Rao et al. (2025) emphasized that perceived benefits are shaped by satisfying experiences with health care delivery, which contribute to improved health status. In this study, respondents, as educated professionals, are capable of recognizing and anticipating the advantages of specific actions, enabling deliberate choices that promote and maintain their health. This suggests that perceived benefits of action function as a key determinant of health-promoting behaviors, guiding decisions that directly influence overall well-being.

TABLE 5. Significant Relationship between Specific Cognitions and Affect and Health Status

Variables	Value	P-value	Decision	Interpretation
Perceived Benefits of Action	0.206*	0.006	Reject	There is a significant Relationship
Perceived Barriers to Action	0.047	0.533	Failed to Reject	No Significant Relationship
Perceived Self-Efficacy	0.173*	0.020	Reject	There is a significant Relationship
Activity-Related Affect	0.084	0.263	Failed to Reject	No Significant Relationship
Interpersonal Influences	0.042	0.571	Failed to Reject	No Significant Relationship
Situational Influences	0.128	0.087	Failed to Reject	No significant Relationship

Another factor significantly associated with health status is perceived self-efficacy ($p = 0.020$). This supports Alyafei and Easton-Carr's (2024) assertion that efforts toward achieving optimal health depend on one's perception of the effectiveness of chosen health-promoting strategies. Paersch et al. (2024) similarly argued that self-efficacy determines the ability to plan, organize, and perform behaviors necessary to reach health goals, highlighting health management as a process shaped by personal belief rather than solely by disease conditions. In this context, respondents' confidence in their abilities directly affects their engagement in health-promoting behaviors, thereby impacting their health outcomes.

Grounded in Nola Pender's Health Promotion Model (Chen & Hsieh, 2021), these findings illustrate the critical role of cognitive processes in health-related decision-making. As M et al. (2023) emphasized, the mind functions as a powerful information-processing system that directs health actions, while Joshi et al. (2025) noted that experiences are encoded and recalled to guide future responses. Thus, perceived benefits of action and self-efficacy emerge as essential determinants of health status among teachers, highlighting the influence of cognitive appraisal in fostering health-promoting behaviors. These results underscore the importance of enhancing teachers' self-efficacy and reinforcing the perceived advantages of health-promoting actions through targeted interventions to improve overall well-being.

IV. DISCUSSION

Overall, the results of this study demonstrate that public school teachers in the Cebu City Division generally maintain a healthy status, yet their health is influenced by a combination of personal factors, prior health-related behaviors, and behavior-specific cognitions. Specifically, nature of work, stress reduction practices, health maintenance behaviors, perceived benefits of action, and self-efficacy were significantly associated with health status. These findings highlight that health outcomes are not solely determined by biological or socio-demographic characteristics but are strongly shaped by health-promoting behaviors, coping strategies, and cognitive perceptions, consistent with Pender's Health Promotion Model. Despite the demands and stressors of the teaching profession, teachers actively engage in behaviors that support their well-being; however, they remain

vulnerable to work-related pressures that can compromise health. Enhancing supportive systems and implementing targeted health promotion programs tailored to teachers' needs are therefore critical for sustaining their wellness and optimizing their effectiveness as educators and role models.

V. CONCLUSION

This study examined health promotion behaviors as determinants of health status among public school teachers. Findings indicate that the majority of respondents (93.89%) maintained a healthy status, reflecting their ability to engage in behaviors that support well-being despite occupational demands. Among personal factors, only the nature of work was significantly related to health status, highlighting the impact of workload and occupational roles on teachers' well-being. Prior health-related behaviors, particularly stress reduction and health maintenance practices, were significantly associated with health, emphasizing the role of proactive and sustained health-promoting behaviors. Cognitive factors, including perceived benefits of action and self-efficacy, were also significantly correlated with health status, confirming that teachers' confidence and awareness of health advantages strongly influence their decisions and behaviors. Grounded in Pender's Health Promotion Model, the study underscores that teachers' health is determined not only by biological or sociocultural factors but also by their behaviors, perceptions, and work environment. These results highlight the need to strengthen stress management programs, promote self-efficacy, and reinforce the value of health-promoting actions to enhance teachers' overall wellness and professional effectiveness.

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