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SCREEN TIME AND DIETARY QUALITY AMONG NURSING STUDENTS AT THE COLLEGE OF NURSING (FEMALE), BADIN

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ABSTRACT

Introduction: Increased screen time is a common trend among nursing students due to academic and social demands. However, its influence on dietary quality remains unclear and understudied.
Objective: This study aimed to assess the association between screen time and dietary quality among nursing students.
Methods: A descriptive cross-sectional study was conducted among 140 nursing students. Data were collected through a self-administered questionnaire using Google Forms. The College of Nursing, Female, Badin, was selected as the research design. Data analysis was performed by using Fisher's Exact Test to examine the association between screen time and dietary quality.
Results: Most participants reported high screen time and moderate dietary quality. However, Fisher's Exact Test indicated no statistically significant association between screen time and dietary quality ($p = 0.282$).
Conclusion: The results revealed no statistically significant relationship between the two variables. Although high screen time and moderate dietary quality were common among participants, the lack of a significant association suggests that screen time alone may not be a primary factor influencing dietary habits in this population.

INTRODUCTION

In today's technologically advanced society, digital media has become essential to everyday life, particularly for students. "Screen time" refers to the amount of time spent on devices such as smartphones, tablets, laptops, and televisions. With the rise of digital learning, social media, and online entertainment, nursing students are frequently exposed to screens throughout their academic and personal lives. Although technology has provided students with innovative learning opportunities, the prolonged usage has been associated with various health issues, including reduced physical activity, poor sleep patterns, increased stress, and, most notably, deteriorating dietary habits. Food intake balance, which refers to the nutritional adequacy and balance of an individual's diet, plays a critical role in supporting general well-being and reducing long-term disease risk. Good dietary quality typically includes regular consumption of fruits, vegetables, whole grains, lean proteins, and minimal intake of processed and high-sugar foods. However, university students often face difficulties in maintaining a healthy diet due to time constraints, academic pressure, and lifestyle habits, including excessive screen time.

Screen exposure often leads to inattentive eating, increased consumption of junk food, and disrupted eating habits. The ever-increasing use of smart devices among college students has become a significant issue, as it is associated with academic difficulties, behavioral changes, emotional problems, and reduced concentration, among other challenges **(Baby, Issac et al. 2021**). Watching television (TV) is considered a lifestyle habit linked to poor dietary quality, mainly due to physical inactivity and the tendency to snack frequently while watching(Kolovos, Jimenez-Moreno et al. 2021). The amount of time spent on screens is believed to be closely linked with increased consumption of unhealthy foods throughout the day.(Tambalis, Panagiotakos et al. 2020).

Screen time has been associated with reduced intake of fruits and vegetables, along with increased consumption of sugary drinks and foods high in fat and sugar.(Jensen, Carpentier et al. 2020). Too much screen time (like using TVs, computers, or mobile devices for more than 2–3 hours a day) can negatively impact a child's growing brain. This can affect how they think and learn, how they move and control their body, how they handle emotions, and their overall health. Excessive screen time and an imbalanced diet can negatively impact learning and memory, which in turn may directly affect the academic performance of adolescents and young adults **(Neophytou, Manwell et al. 2021) and** Screen time has been linked to various adverse physical health (Visier-Alfonso, Garrido-Miguel et al. 2023).

Prolonged screen time has been shown to negatively influence dietary behaviors. Evidence suggests that individuals who spend extended periods on screens tend to consume more sugar-rich foods and beverages, particularly soft drinks, along with increased intake of energy-dense, nutrient-poor items such as refined grains, fried snacks, desserts, and fast foods. At the same time, their consumption of healthier food options—including fiber, fish, vegetables, fruits, and whole grains—is significantly reduced. These dietary shifts may contribute to overall poor dietary quality(Ahmed, Rizwan et al. 2022). Screen time and light-emitting devices used during late hours play a major role. (Saxena, Parmar et al. 2021). Daily screen time usage for approximately 8 hours solely for media consumption may significantly impact eating habits and other health-related behaviors(Vizcaino, Buman et al. 2020).

This evidence indicates that, for better health, adolescents should restrict their daily exposure to screen-based devices, keeping

screen time to no more than 2 hours per day.(Fan, Yan et al. 2022). These numbers are worrying because depression and anxiety can lead to many serious problems. They are linked to issues like trouble growing and developing, struggling in school, problems with friends and family, behavior issues, low confidence, drug or alcohol use, and even thoughts of suicide**(Maras, Flament et al. 2015).** Too much time in front of screens, linked to a higher risk of obesity in adults, and more research is needed on eating and lifestyle habits to help prevent and control obesity in low- and middle-income countries. More people eat, and how active or inactive they are**. (Benaich, Mehdad et al. 2021)**. The excessive use of screens affects dietary quality. High screen time can contribute to unhealthy practices such as skipping meals and consuming low-nutrient foods, which ultimately affect focus, concentration, and overall health. This study aims to evaluate the association between screen time and dietary quality to promote healthier habits, reduce health risks, and support wellness programs that improve physical and mental well-being among nursing students.

Aim of the Study

To assess the association between screen time and dietary quality among nursing students at the College of Nursing (Female), Badin.

Objectives of the Study

1. To assess the average daily screen time among nursing students at CON(F) Badin
2. To evaluate the association between screen time and dietary quality among nursing students at CON (F) Badin

Research Question

- What is the average usage screen time of nursing students at the College of Nursing (F) Badin?
- Is there any association between screen time and dietary quality among nursing students at the College of Nursing (F) Badin?

METHODOLOGY

Study design

The comparative Cross-sectional study design was applied to assess the association between screen time and dietary quality among nursing students at the College of Nursing (F), Badin.

Study Setting

College of Nursing (Female), Badin

Sample Size

The data were collected using a 140-sample size, which was estimated from a total population of 200 using RaoSoft software, with a 95% confidence interval and a 5% margin of error.

Sampling Technique

The Non-probability convenience sampling technique was employed.

Selection Criteria

Inclusion Criteria

Female nursing students enrolled in the BS Nursing program from the 1st year to the 4th year.

Those who were willing to participate

Exclusion Criteria

Those who don't have a mobile phone or a laptop.

Those who were not willing to participate

Data Collection Procedure

An online questionnaire survey was conducted, which ensured participant anonymity. Participants were provided with informed consent, and a Google Form link was sent to them via email and WhatsApp.

Data Collection Tool

The Likert scale questionnaires, the Spanish Healthy Eating Index, and Screen time were used in this current study. The Spanish Healthy Eating Index scale has 12 questions to assess the dietary patterns of participants. It is a 6-point Likert scale, 0=Never or hardly, 1=1-3 times/month, 2=1 time/week, 3=2-4 times/week, 4=5-6 times/week, 5=1 time/day, 6=2 or more times/day. The screen time scale evaluates the screen time usage of participants.

Ethical Consideration

Ethical approval was obtained from the participants. Participants were informed about the purpose of the research. Furthermore, participation was completely voluntary, and students were informed of the confidentiality and anonymity of their responses. Permission was obtained from the participants. No personal details were collected, and the data was used for a research study.

RESULTS

The data analysis yielded insightful results concerning screen time and dietary quality among nursing students. The estimated finding shows that there is no significant association between screen time and dietary quality among nursing students at the College of Nursing, female, Badin.

Demographic Variables of the Study

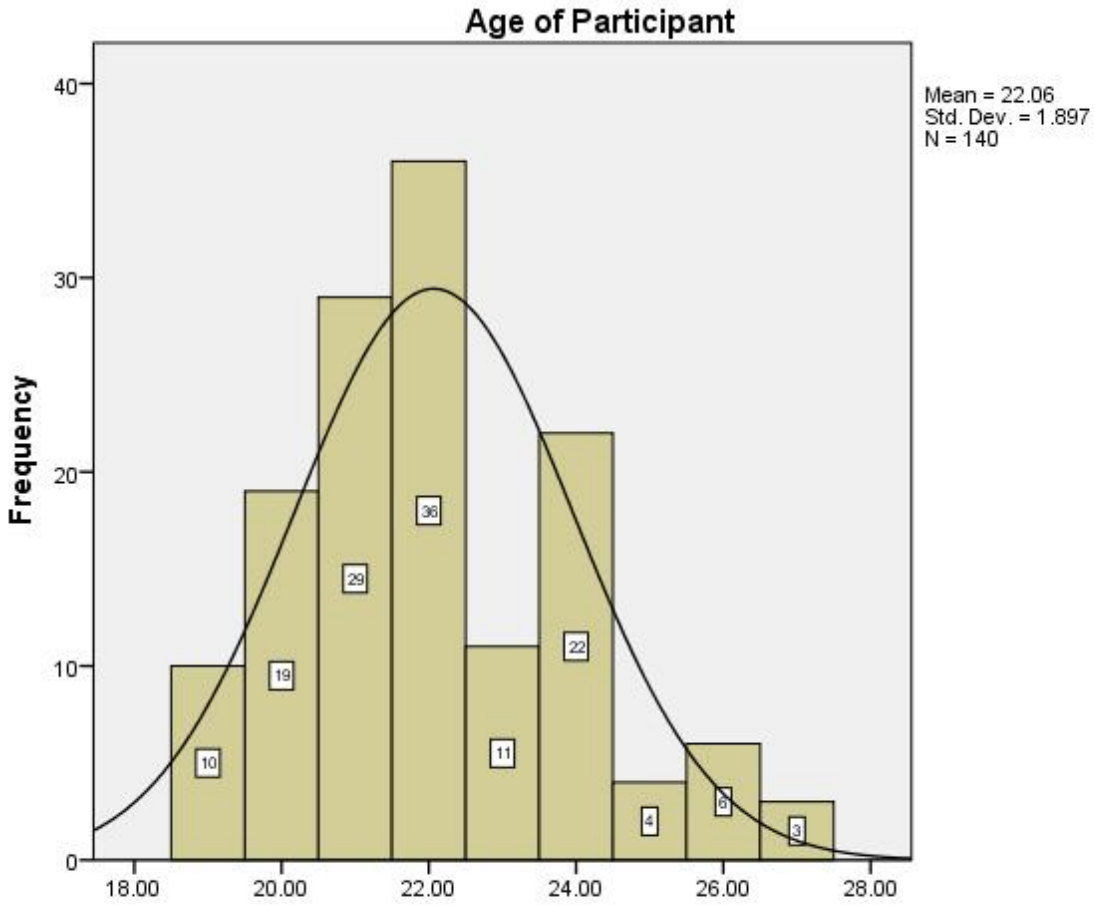

Figure 1 shows that most of respondents were 22 years (36 students), 21years (29 students), 24 years (22 students, 20 years (19 students), 23 years (11students), 19 years (10 students), 26 years (6 students), 25 years (students),27 years (3 students) their mean age was 22.06 with standard deviation 1.897.

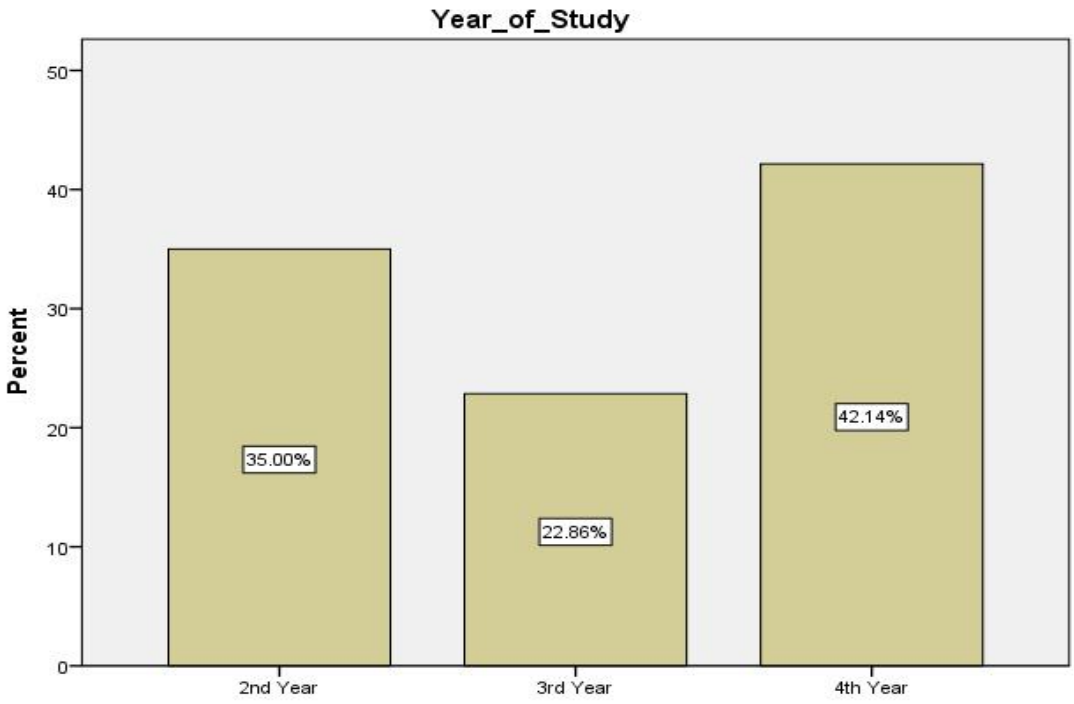

Figure 2 shows that the majority of respondents are from the 4th year (42.14%), while 2nd year (35.00%) and 3rd year (22.86%) respectively.

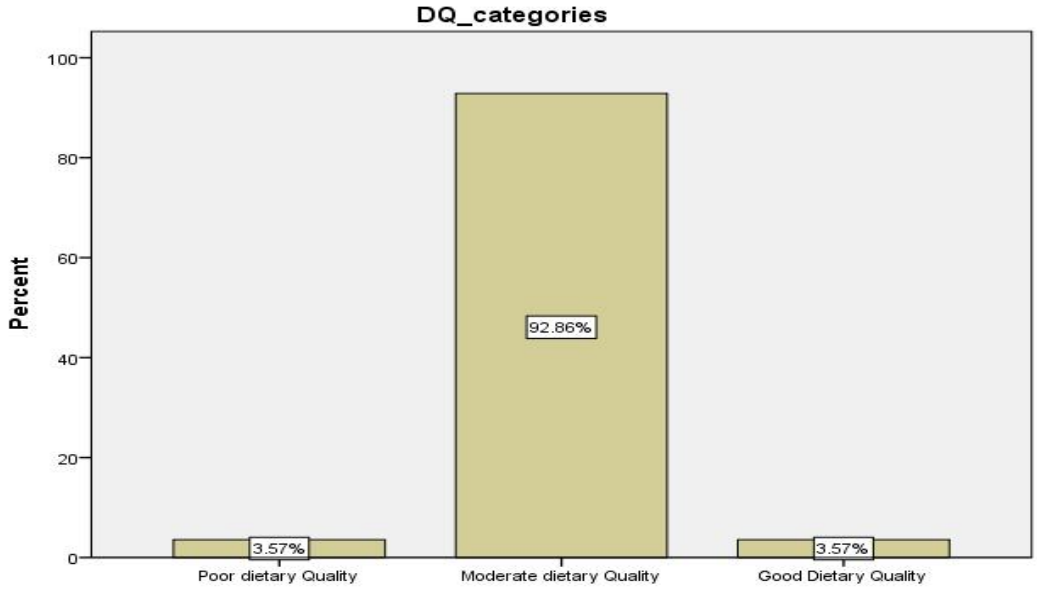

Figure 3 shows that 92.86% of respondents fall moderate dietary quality category, 3.57% of respondents fall in the good dietary quality category, and 3.57% of respondents fall in the poor dietary quality category.

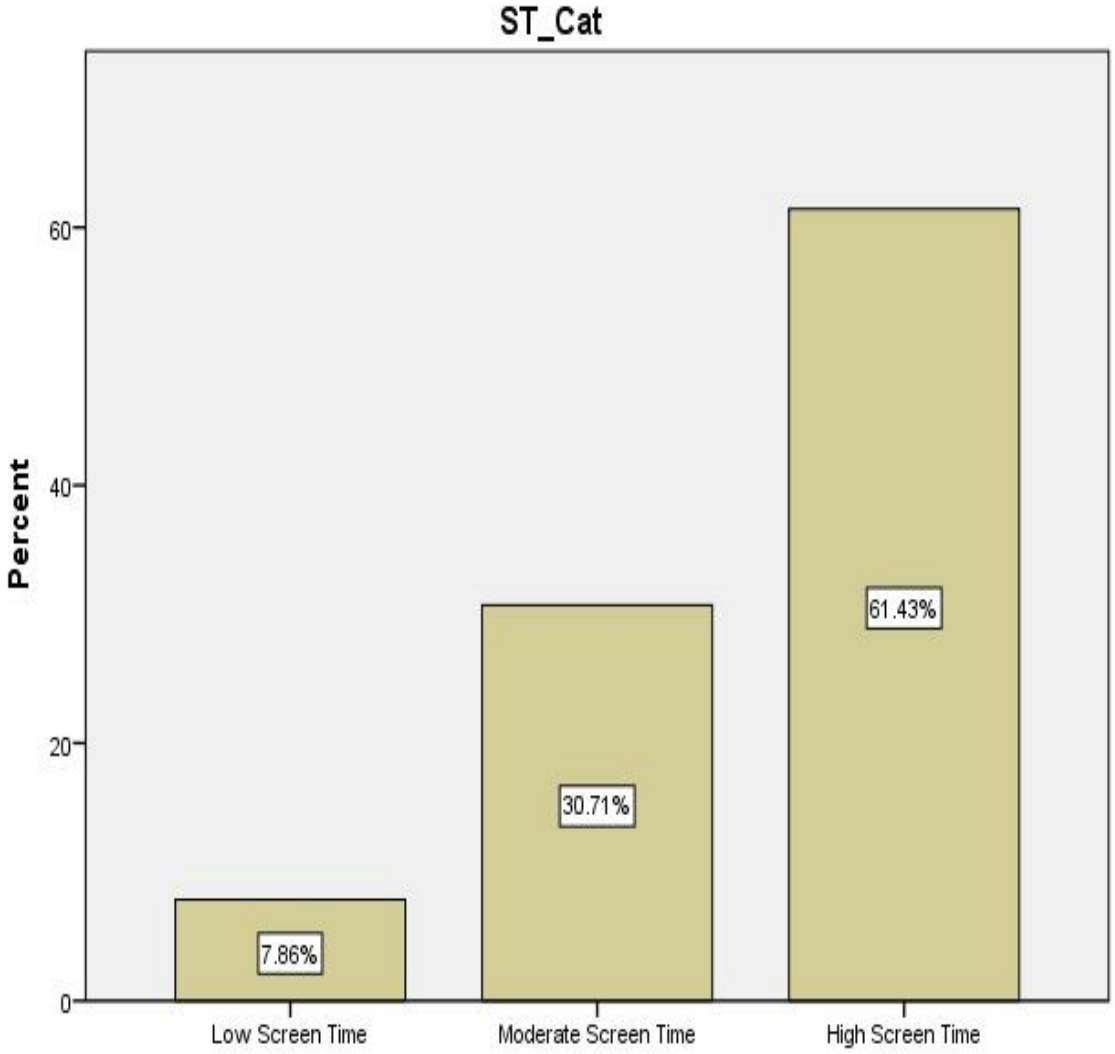

Figure 4 shows that respondents (61.43%) fall into the high screen time category, followed by 30.71% with moderate screen time, and only 7.86% with the low screen time.

Table 1: Cross Tabulation: Association of Dietary Quality with Screen Time

Dietary Quality	Screen Time			Total	Fishers Exact Test Value	P-Value
	Low Screen time	Moderate Screen Time	High Screen Time			
Poor dietary quality	0	0	5	5	4.501	0.282
Moderate dietary quality	10	41	79	130		
Good dietary quality	1	2	2	5		
Total	11	43	86	140		

This table examines the association between screen time and dietary quality. The findings, p-value is 0.282 with Fisher's exact value 4.501, show that there is no significant association between screen time and dietary quality among nursing students at the College of Nursing, Female, Badin.

DISCUSSION

The current study aimed to explore the association between screen time and dietary quality among nursing students. A total of 140 participants were included, with ages ranging from 18 to 26 years. The cross-tabulation results showed that most students with moderate dietary quality also reported high screen time (79 out of 130). Only five participants with high screen time had poor dietary quality, and very few students in any screen time category achieved good dietary quality. Fisher's Exact Test produced a value of 4.501 with a p-value of 0.282, which is above the standard significance level of 0.05. This indicates that there was no statistically significant association between screen time

and dietary quality among the nursing students in this cross-sectional study.

The findings of the present study are consistent with those of Saxena (2021), who also examined similar variables and reported no significant association between screen time and dietary quality. This consistency across studies strengthens the observation that the relationship between these variables may not be as direct or strong as previously assumed.

In contrast, a study by Ahmed, H. (2022) reported a significant association between screen time and dietary quality among 150 participants (62.7% females and 37.3% males), suggesting that differences in population characteristics, measurement tools, and study settings may influence outcomes.

CONCLUSION

The results revealed no statistically significant relationship between the two variables. Although high screen time and moderate dietary quality were common among participants, the lack of a significant association suggests that screen time alone may not be a primary factor influencing dietary habits in this population. These findings indicate that dietary behavior is likely influenced by a combination of factors, such as academic stress, lifestyle choices, and environmental conditions.

LIMITATION

Although the study makes valuable contributions, it has several limitations. First, the cross-sectional design limits the ability to establish a causal relationship between screen time and dietary quality. Secondly, the sample was limited to nursing students from a single institution, reducing the generalizability of the findings to other student populations. Finally, the assessment of dietary quality was based on overall patterns rather than detailed nutritional intake, which may not fully capture specific dietary risks or deficiencies.

RECOMMENDATION

Further research is recommended to explore other possible influences on dietary quality, such as academic stress, physical activity, sleep patterns, emotional well-being, and the purpose of screen use. Many students may prioritize screen time for academic tasks rather than using traditional study methods like books, which may also influence their daily routines and lifestyle choices. Addressing these factors may provide a more comprehensive understanding of student health and support the development of effective health promotion strategies within nursing education.

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