Awareness and Attitude of High School Students Towards Their Practices on Fast Food Consumption

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Abstract-*The consumption of fast food has increased significantly among adolescents, raising concerns about its potential health impact. However, limited research exists on how high school students in the Philippines perceive and engage with this issue. This descriptive-correlational study described students' awareness, attitudes, and consumption practices toward fast food and examined the relationships among these variables. Using cluster sampling, data were collected from at least 247 high school students. Results showed that students had a good level of awareness (M=10.46; SD=3.62), a favorable attitude (M=3.98; SD=0.58), and a moderate frequency of consumption (M=3.37; SD=0.84). A weak negative correlation was found between awareness and consumption (r=-0.259, p<.001), while attitude showed a moderate positive correlation (r=0.535, p<.001). Multiple regression analysis revealed that both awareness (β = -0.233, p < .001) and attitude (β = 0.523, p < .001) significantly predicted consumption practices, with attitude being the stronger predictor. In conclusion, while students are aware of the health risks associated with fast food, their limited understanding of its nutritional value may lead to less healthy choices. Despite this, they maintain a favorable attitude toward fast food, which has a more significant influence on their consumption. To improve health outcomes, future research should balance questionnaire items more effectively, consider grade-level sampling, and investigate the social, environmental, and emotional factors that impact eating habits. Additionally, adopting longitudinal or experimental research designs could further uncover the causal relationships between awareness, attitude, and fast food consumption.*

Keywords*: awareness, attitude, consumption practices, fast food.*

I. INTRODUCTION

The global rise in fast food consumption among adolescents has become a growing public health concern due to its contribution to poor dietary habits and serious health risks. Often referred to as junk food, fast food typically contains refined sugars, additives such as MSG and tartrazine, and is low in essential nutrients, including protein, vitamins, and fiber (Wiyaja et al., 2023). This dietary pattern is strongly associated with obesity, cardiovascular diseases, and other long-term health issues. Fast foods, being quick, affordable alternatives to home-cooked

meals, are high in calories, fats, sugars, and sodium, which contribute to undesired weight gain (MedlinePlus, 2024). Li et al. (2020) observed that 55.2% of adolescents across 54 low- and middle-income countries consume fast food on a weekly basis, with a rate of 10.7% in Southeast Asia. In the Philippines, Anthony (2021) linked the rise in fast food consumption to adolescents' exploration of independence and evolving eating habits during their developmental years.

The growing popularity of fast food in the Philippines calls for urgent attention to the factors driving its consumption. Nabila et al. (2024) found that students in Bogura town consumed fast food an average of 4.01 times per month, with hamburgers and pizza being the most popular options. Sex differences emerged, as males consumed fast food as snacks, while females consumed it as meals. Consumption was influenced by social settings, such as gatherings with friends or special occasions, underscoring the significant role of peer pressure. Similarly, Fakhira et al. (2021) identified peer pressure as a major factor driving adolescents to choose fast food, often due to invitations from friends or the social appeal of fast-food outlets. While fast food consumption is widespread among Filipino teens, there are still gaps in research regarding students' views and behaviors toward fast food. Bohara et al. (2021) linked poor nutrition knowledge to higher fast food intake, and Ong et al. (2022) noted the limited research on cultural and social influences on student attitudes. Devine et al. (2023) highlighted the need for more comprehensive assessments of school-based nutrition programs.

By addressing these gaps, this study described the awareness, attitudes, and consumption practices of high school students toward fast food. It also explored the relationships between students' levels of awareness and attitudes and how these relate to their consumption practices, providing insights that could guide future interventions. Specifically, the study aimed to determine the level of awareness of high school students regarding fast food consumption, examine their attitudes toward it, and assess the extent of their consumption practices. Additionally, it investigated whether there is a significant relationship between awareness and attitude in relation to consumption practices, and whether awareness and attitude can predict these practices. Finally, the study examined whether there are significant differences in fast food consumption practices when the students' sex and socio-economic status are considered.

II. LITERATURE REVIEW

Numerous studies have documented the health risks associated with consuming fast food. Kumar and Raina (2024) highlighted the strong association between fast food consumption and adolescent obesity. Supporting this, Nyangoya and Attoni (2023) found associations between fast food and conditions such as obesity, heart disease, diabetes, depression, and reproductive system complications. Ra (2022) added that combining fast food with sugary drinks exacerbates stress, depressive symptoms, and suicidal thoughts, emphasizing the need for school and community-based initiatives.

Despite health interventions, the consumption of fast food continues to rise. Nabila et al. (2024) revealed that 74.48% of students ate fast food in school, despite knowing its harmful effects. Factors such as taste, convenience, affordability, and social media influence continue to encourage consumption. Islam et al. (2024) noted that students' attitudes, social norms, and perceived behavioral control significantly influence their consumption of fast food. While

many students are aware of the health consequences, their nutrition knowledge often remains insufficient to foster lasting behavioral change (Fakhira et al., 2021; Catapang, 2022). Taste, convenience, and the allure of fast food often outweigh health concerns. Even with moderate to high awareness of the risks, many students continue to maintain unhealthy eating patterns, underscoring that education alone is insufficient (Kusemererwa, 2021; Dsouza & Dsouza, 2022).

Sex and socio-economic status (SES) both influence fast food consumption. Male students, driven by peer pressure and social norms, tend to eat more fast food, while females, being more health-conscious, make healthier choices (Didarloo et al., 2022). These differences call for gender-sensitive interventions (Rakhshani et al., 2024). SES also plays a role, students from higher SES backgrounds usually have better nutritional knowledge and habits, while those from lower SES groups often prefer fast food due to cost and accessibility (Jia et al., 2024). This highlights the need for targeted public health and policy initiatives in schools.

This study is grounded in two theories to explain fast food consumption behaviors. The Theory of Planned Behavior (TPB), introduced by Icek Ajzen (1991), predicts behavior based on attitudes, social norms, and perceived control, suggesting that students' consumption is influenced by their attitudes, social pressures, and accessibility. The Health Belief Model (HBM), developed in the 1950s, focuses on individuals' perceptions of health risks, benefits, and barriers, helping to explain why students continue to consume fast food despite being aware of the health risks (Green et al., 2022). Their decisions are influenced by factors such as the perceived benefits of healthy eating and barriers like convenience or peer pressure.

III. MATERIALS AND METHODS

This research used a non-experimental quantitative design, specifically a descriptive-correlational approach. The study aimed to describe high school students' awareness, attitudes, and practices regarding fast food consumption and to explore potential relationships between awareness, attitudes, and consumption practices, informing future interventions. The respondents were 247 junior and senior high school students from private secondary institutions during the second semester of SY 2024 to 2025. The total student population was 689 and using a 95% confidence level and a 5% margin of error, the sample size was determined.

The researchers used survey questionnaires to gather data. The survey questions were adapted from a review of related literature and studies. It consisted of four sections: Demographic Profile (DP), Awareness Level Questionnaire (ALQ), Attitude Questionnaire (AQ), and Practices Questionnaire (PQ). The Demographic Profile (DP) section identified the sex and socio-economic status (SES) of the students, including weekly allowance, adapted from Igcasama et al. (2024). Grade levels were included for tracking and representativeness. The Awareness Level Questionnaire (ALQ) section described students' awareness of fast food consumption, with 14 items adapted from Nabila et al. (2024) and Rajendiran et al. (2022). The Attitude Questionnaire (AQ) section described students' attitudes toward fast food consumption, consisting of 10 items adapted from ALFaris et al. (2015). The Practices Questionnaire (PQ) section described students' practices toward fast food consumption, with 10 items adapted from Prasad et al. (2021) and Pratheepkumar et al. (2023).

Table 1

Reliability Analysis of the Research Instruments

Variables	Number of Items	Cronbach's Alpha	Verbal Interpretation
Level of Awareness	14	0.865	Good
Attitude	10	0.804	Good
Practices	10	0.879	Good

Jamovi version 2.6.23 was used for statistical analysis. Descriptive statistics, including frequency and percentage, were used to categorize respondents' sex, grade levels, and SES. The mean and standard deviation were used to describe the levels of awareness, attitudes, and practices regarding fast food consumption. The Pearson Product-Moment Correlation Coefficient examined the relationship between awareness levels and attitudes toward fast food practices. Multiple Regression Analysis identified awareness and attitudes as predictor variables influencing fast food consumption practices. T-test and ANOVA were used to assess differences in practices based on sex and SES.

IV.   RESULTS AND DISCUSSION

Level of Awareness Toward Fast Food Consumption

Table 2 presents the percentage distribution of high school students' awareness on various statements regarding fast food, in which they were asked to evaluate whether the given statements were true or false. The respondents are aware that fast food consumption can harm the liver (207; 83.8%), be detrimental to the heart (204; 82.6%), and lead to high blood pressure (204; 82.6%). They also understand that saturated fats affect cholesterol levels (199; 80.6%) and that fast food is not associated with good nutrition (198; 80.2%). These statements were correctly identified as false by the high school students, demonstrating a good level of awareness based on the scoring scale.

On the other hand, the lowest percentage of correct responses was recorded for the statement that less fast food increases health risks (147; 59.5%). Likewise, (162; 65.6%) were aware that saturated fat is not a harmless fat, and (164; 66.4%) recognized that trans fat is not healthy. In addition, (170; 68.8%) understood that fast food is not high in fiber, and the same number (170; 68.8%) were aware that fast food can affect mental health. These responses were categorized as fair, suggesting that while some students demonstrated a correct understanding, a considerable number still hold misconceptions, indicating a moderate level of awareness.

Table 2

Percentage Distribution of High School Students' Awareness Responses

Items	% of Total (Correct)	% of Total (Incorrect)
I am aware that…		
fast food does not harm my liver.	83.8% (207)	16.2% (40)

fast food is not harmful to my heart.	82.6% (204)	17.4% (43)
fast food does not cause high blood pressure.	82.6% (204)	17.4% (43)
saturated fats do not affect cholesterol levels.	80.6% (199)	19.4% (48)
fast food links to good nutrition.	80.2% (198)	19.8% (49)
fast food is low in sugar.	78.9% (195)	21.1% (52)
fast food is not considered junk food.	78.5% (194)	21.5% (53)
fast foods contain essential vitamins.	78.1% (193)	21.9% (54)
fast food decreases diabetes risk.	71.7% (177)	28.3% (70)
fast food is high in fiber.	68.8% (170)	31.2% (77)
fast food does not affect mental health.	68.8% (170)	31.2% (77)
trans fat is healthy for me	66.4% (164)	33.6% (83)
saturated fat is a non harmful fat.	65.6% (164)	34.4% (85)
less fast food increases health risks.	59.5% (147)	40.5% (100)

Legend: **0.0%-24.9%** = *Very Poor*; **25.0%-49.9%** = *Poor*; **50.0%-74.9%** = *Fair*; **75.0%-89.9%** = *Good*; **90.0%-100.0%** = *Excellent*

Moreover, Table 3 presents the overall means of high school students' awareness toward fast food consumption, indicating a good level (M = 10.46; SD = 3.62). High school students are generally aware of the health risks linked to fast food. However, they often lack a deeper understanding of specific nutritional issues, like the presence of trans fats.

Table 3

Level of Awareness Among High School Students

	Mean	SD	Interpretation
Overall Mean	10.46	3.62	Good

Legend: **0-2** = *Very Poor*; **3-5** = *Poor*; **6-8** = *Fair*; **9-11** = *Good*; **12-14** = *Excellent*

Consistent with the result, Fakhira et al. (2021) found that high school students recognize that fast food is unhealthy, but their knowledge of its nutritional content is limited. Similarly, Catapang (2022) reported that many students demonstrated satisfactory awareness levels but lacked understanding of the negative health effects of fast food and its contribution to disease development. Furthermore, Kusemererwa (2021) highlighted that while high school students are aware of their dietary practices, gaps remain in their nutritional understanding. These findings signify that while students are aware of the risks of fast food, awareness alone does not necessarily translate into healthier behavior.

Attitudes Toward Fast Food Consumption

Table 4 reveals that the respondents agreed that the quality of their fast food is important (M = 4.40; SD = 0.73), that they consider the price when ordering it (M = 4.36; SD = 0.87), and that they eat fast food because of its taste (M = 4.16; SD = 0.82). However, they only moderately agreed that they are concerned about who served their food (M = 3.49; SD = 1.24). The overall mean attitude score (M = 3.98; SD = 0.58) suggests that high school students generally have a favorable attitude toward fast food consumption.

Table 4

High School Students' Attitudes Toward Fast Food Consumption

Items	Mean	SD	Interpretation
I consider the quality of my food important.	4.40	0.73	Favorable
I consider the price when ordering my food.	4.36	0.87	Favorable
I eat fast food because it tastes good.	4.16	0.82	Favorable
I enjoy the variety of fast food.	3.95	0.93	Favorable
I am concerned about fast food hygiene.	3.95	0.96	Favorable
I worry about my nutrition when eating.	3.94	1.02	Favorable
I eat fast food because it is available.	3.87	0.99	Favorable
I eat fast food because it is convenient.	3.84	1.00	Favorable
I care about its availability near the school.	3.82	1.04	Favorable
I am concerned about who served my food.	3.49	1.24	Neutral
Overall Mean	3.98	0.58	Favorable

Legend: *1.00-1.80= Very Unfavorable, 1.81-2.60 =Unfavorable, 2.61-3.40=Neutral, 3.41-4.20 =Favorable, 4.21-5.00 =Very Favorable*

The findings are supported by Xue et al. (2021), who noted that attitudes can significantly influence behavior, suggesting that an individual's positive stance may persist even when they are aware of potential health risks. The findings imply that despite awareness of health risks, students' fast food consumption is primarily driven by quality, price, and taste, indicating that immediate satisfaction outweighs long-term health considerations.

Extent of Practices on Fast Food Consumption

The data presented in Table 5 shows that the respondents often order fast food with friends (M = 3.91; SD = 1.16), pair it with sweetened beverages (M = 3.59; SD = 1.17), and consume it during busy days (M = 3.54; SD = 1.18). However, they only sometimes eat fast food when studying their lessons (M = 3.10; SD = 1.27) and modify or add extras to their orders (M = 3.13; SD = 1.21). The overall mean score (M = 3.37; SD = 0.84) suggests that high school students engage in moderate frequency of fast food consumption.

Table 5

High School Students' Practices on Fast Food Consumption

Items	Mean	SD	Interpretation
I order fast food with my friends.	3.91	1.16	High
I pair fast food with sweetened beverages.	3.59	1.17	High
I consume fast food on busy days.	3.54	1.18	High
I eat fast food when stressed.	3.44	1.29	Moderate
I order fast food as snacks.	3.29	1.23	Moderate
I order fast food during mealtimes.	3.28	1.26	Moderate
I choose healthier fast food options. (e.g., salads, etc.)	3.27	1.12	Moderate
I order fast food during school events.	3.18	1.30	Moderate
I modify or add extras to my fast food orders.	3.13	1.21	Moderate

I eat fast food when studying my lessons.	3.10	1.27	Moderate
Overall Mean	3.37	0.84	Moderate

Legend: 1.00-1.80= Very Low, 1.81-2.60 =Low, 2.61-3.40=Moderate, 3.41-4.20 =High, 4.21-5.00 =Very High

Nabila et al. (2024) highlights that fast food consumption is often linked to social settings, with individuals frequently consuming fast food in the company of friends. Similarly, Fakhira et al. (2021) emphasize that fast food restaurants serve as gathering spots for friends or family, citing the atmosphere and convenience of these establishments as key factors in promoting consumption. The findings imply that while students do not rely heavily on fast food, its social and situational convenience still plays a significant role in shaping their eating behavior.

Relationship of Awareness and Attitude to Practices

Table 6 presents the correlations between awareness, attitude, and practices related to fast food consumption. There is a weak negative correlation between awareness and practices (Pearson's r = -0.259, p < 0.001), indicating that as awareness increases, fast food consumption slightly decreases. In contrast, a moderate positive correlation was found between attitude and practices (Pearson's r = 0.535, p < 0.001), suggesting that a more positive attitude toward fast food is linked to higher consumption. These findings imply that awareness alone may not effectively reduce fast food consumption among students, and that interventions should focus more on reshaping attitudes.

Table 6

Correlation of Awareness and Attitude to Practices

	Awareness	Attitude
Practices		
Pearson's r Correlation	-0.259***	0.535***
Degrees of Freedom	245	245
p-value	< .001	< .001

*Note: * p < .05, ** p < .01, *** p < .001*

Didarloo et al. (2022) conducted a study among adolescents, finding that increased awareness of the health risks associated with fast food did not significantly reduce intake. This aligns with the weak negative correlation between awareness and practices in this study. Similarly, Bhatoolaul et al. (2024) reported that students with more favorable attitudes toward fast food were more likely to consume it regularly, reflecting the moderate positive correlation found between attitude and practices in this study. These findings reveal that while awareness campaigns are important, they may not be sufficient on their own to change eating habits.

Predictive Relationship of Awareness and Attitude Toward Practices

The multiple linear regression analysis presented in Table 7 indicates that awareness (β = -0.233; p < .001) is a significant predictor of fast food consumption practices. The negative coefficient suggests that as awareness of fast food increases, high school students' practices toward their consumption decrease. Similarly, attitude is also a significant predictor (β = 0.523; p < .001), with a positive coefficient indicating that more favorable attitudes toward fast food

are associated with an increase in consumption practices. The coefficient of determination (R^2 = 0.340) suggests that awareness and attitude together explain 34% of the variation in fast food consumption practices. Notably, attitude is the stronger predictor of fast food consumption, as it has a higher beta coefficient compared to awareness, indicating a greater influence on students' consumption practices. The model demonstrates adequate fit (F = 62.9; p < .001), confirming that both awareness and attitude are significant predictors of students' practices related to fast food consumption. The results indicate that students' attitudes play a stronger role than awareness in shaping their fast food consumption practices, with positive attitudes increasing consumption and awareness slightly decreasing it.

Table 7

Awareness and Attitude as a Predictor of Practices on Fast Food Consumption

Predictor	Estimate	SE	t	p	β
Intercept	0.9246	0.3345	2.76	0.006	
Awareness	-0.0583	0.0121	-4.47	< .001	- 0.233
Attitude	0.7580	0.0754	10.05	< .001	0.523

Model 1 (R = 0.583; R^2=0.340; Adjusted R^2=0.335; RMSE=0.684; F=62.9; df1=2; df2=244; p< .001)

Studies supporting the results include Qin et al. (2024), who found that attitude significantly influences fast food consumption practices, aligning with the current findings. Sidabutar (2023) also supports this, showing that higher knowledge leads to healthier consumption choices, although the present study found a weaker relationship with awareness. Similarly, Didarloo et al. (2022) observed that while awareness of health risks is present, it does not strongly reduce consumption, which aligns with the weak negative correlation between awareness and practices found in this study. Lastly, Bhatoolaul et al. (2024) found that more favorable attitudes toward fast food led to higher consumption, reinforcing the finding that attitude is a significant predictor of consumption practices. The findings imply that interventions aiming to reduce fast food consumption should focus more on reshaping attitudes rather than solely increasing awareness.

Differences in Practices Based on Moderator Variables

Differences Between Practices and Sex

Table 8 presents the results of differences in practices on fast food consumption by sex. An independent sample t-test was used to compare practices on fast food consumption between males and females. On average, females (M = 3.43; SD = 0.80) reported slightly higher practices than males (M = 3.32; SD = 0.89). This difference was not significant, t (245) = -1.05, p = 0.293.

Table 8

Difference of Practices on Fast Food Consumption by Sex

Sex	N	Mean	SD	df	t	p	Interpretation
Male	122	3.32	0.89				
Female	125	3.43	0.80	245	-1.05	0.293	Not Significant

Total	247

The findings align with the study by Fitriantia et al. (2023), which found that although females reported a higher frequency of fast food consumption practices compared to males, there was no significant relationship between sex and fast food consumption behavior. Similarly, Samingan and Octaviani (2021) also observed no significant relationship between gender and fast food consumption. These studies indicate that sex does not significantly affect fast food consumption practices.

Differences Between Practices and SES

A Fisher's one-way ANOVA was conducted to examine the difference in fast food consumption practices based on weekly allowance. The results indicated that students with a weekly allowance of PHP 1,001-1,500 had the highest mean score (M = 3.79; SD = 0.95), while students with a weekly allowance of PHP 100-500 had the lowest mean score (M = 3.18; SD = 0.83), suggesting that higher allowances are associated with greater fast food consumption practices. The ANOVA test revealed a significant difference in fast food consumption practices based on weekly allowance, $F_{(5, 241)} = 3.18$, p = 0.008.

Table 9

Difference of Practices on Fast Food Consumption by Weekly Allowance

Weekly Allowance	N	Mean	SD	df1	df2	F	p	Interpretation
PHP 100-500	124	3.18	0.83					
PHP 501-1,000	71	3.49	0.74					
PHP 1,001-1,500	28	3.79	0.95					
PHP 1,501-2,000	10	3.44	0.81	5	241	3.18	0.008	Significant
PHP 2,001-2,500	4	3.60	0.42					
PHP 2,501 and above	10	3.58	1.11					
Total	**247**							

Post hoc comparisons using the Tukey HSD test (Table 10) showed a significant difference between students with a weekly allowance of PHP 100-500 and those with PHP 1,001-1,500 (p = 0.008), but no other pairwise comparisons were significant.

Table 10

Significant Pairwise Comparisons from Tukey Post Hoc Test

Groups Compared	Mean Difference	p	Verbal Interpretation
PHP 100-500 and PHP 1,001-1,500	-0.602**	0.008	Significant

*Note: * p < .05, ** p < .01, *** p < .001*

The effect size, measured by eta squared ($\eta^2 = 0.062$), suggests a medium to large effect, indicating that weekly allowance explains a moderate proportion of the variance in fast food consumption practices

Table 11

Effect Size (Eta Squared) for ANOVA on Weekly Allowance

	$\eta2$	Verbal Interpretation
Weekly Allowance	0.062	Medium-Large Effect

Legend: $\eta2=0.01$ (*Small*); $\eta2=0.06$(*Medium*); $\eta2=0.14$(*Large*)

Several studies have explored the relationship between socio-economic status (SES) and fast food consumption. Mawarni et al. (2020) found that students with higher pocket money tend to consume more fast food due to greater purchasing power, a finding that aligns with the results of this study. Students in the PHP 1,001-1,500 allowance group demonstrated higher fast food consumption, supporting the observation that increased financial resources can lead to greater fast food consumption. Additionally, Jia et al. (2024) highlighted that lower SES students are more likely to choose fast food because it is more affordable and accessible, which further supports the idea that financial resources influence fast food consumption practices.

V. CONCLUSION

In conclusion, high school students are aware of fast food's health risks but lack understanding of its nutritional content, showing a need for better health education. Attitude has a stronger impact on consumption than awareness, with factors like convenience, social settings, and emotions also influencing choices. While awareness slightly reduces intake, a positive attitude increases it. These results support the Health Belief Model and Theory of Planned Behavior. Sex had no significance, but weekly allowance significantly affected consumption.

To address this, schools should implement nutrition education programs and promote healthier alternatives in canteens. Parents and community leaders also play a vital role in shaping students' eating habits. Future studies should include a more balanced set of questions and consider a wider range of grade levels to enhance accuracy. Researchers should also investigate other factors that may influence fast food consumption, such as family routines, peer influence, cultural background, emotional eating patterns, and the level of health knowledge. Conducting similar research in different regions or cultural contexts may provide additional insights. Moreover, using various research approaches such as experimental, longitudinal, or qualitative designs can offer a deeper understanding of how awareness and attitudes affect fast food consumption over time.

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