



Adolescents' Self-Efficacy and Perceived Barriers toward Healthy Eating Habits in Port Said City

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ABSTRACT

Background: Adolescents constitute one fifth of the world population, the majority 84 percent are living in developing countries. If they do not meet their nutritional demands, they are at risk of becoming malnourished. **Aim:** The study was intended to assess adolescents' self-efficacy and perceived barriers toward healthy eating habits in Port Said city. **Research design:** This research employed a cross-sectional research design. **Setting:** The research was carried out at five preparatory schools chosen randomly from all five districts of Port Said city, Egypt. **Sample:** A multistage sampling technique was used in this study. Students from the two classes from first and second grade were chosen randomly from previous chosen schools, with a total number of 350 students. **Tools:** Three tools were used in this study, first tool: Dietary questionnaire, which divided into two parts: 1) Demographic characteristics of the studied students; 2) Dietary habits, second tool: Self-efficacy scale and third tool: Perceived barriers to healthy eating. **Results:** 51.7% of the studied students aged <12 years, 70.6% of the studied students are female and 38.3% were ranked the first according to birth order. There was statistical significant correlation between crowding index and perceived barriers. **Conclusion:** The majority of the studied students had good dietary habits; more than half of the studied students had moderate level of self-efficacy, besides there was statistical significant correlation between self-efficacy and perceived barriers. **Recommendation:** Develop customized nutritional interventions to raise adolescent awareness and encourage them to adopt healthy eating habits. Conduct health programs that target eating self-efficacy and improving dietary habits during early adolescence period.

Keywords: Adolescent, Dietary habits, Perceived barriers, Self-efficacy.

Introduction

The world today has more young people than it ever has; with roughly 1.2 billion of them being adolescents aged 10 to 19 years. Adolescence is a pivotal period in one's life. It is a time when people establish their independence, form new relationships, learn social skills, and learn behaviors that will last a lifetime. It can also be

one of the most difficult times of the life (WHO, 2018).

Adolescence is a particularly sensitive time due to the nutritional demands of growth and maturation, which are higher than adult requirements. A growing body of evidence suggests that nutrition and health are inextricably linked. Diet has been proven to influence the

primary causes of chronic diseases in different studies (Iyalomhe, Esiemokhai, Nwadike, Osunde, & Samuel, 2018). Furthermore, nutritional patterns formed in childhood and adolescence tend to persist throughout adulthood (Drenowatz, Greier, & Klein, 2018). Nutritional problems in early childhood, as well as in early adolescence, have a cumulative effect on adolescent eating habits and weight status (WHO, 2014).

Dietary habits are crucial for teenager growth and have been related to a number of chronic diseases. In addition to the hazards that result from poor dietary choices on an individual level, they also cost the health-care system a lot of money. Dietary intake is linked to more than just body weight regulation; various studies have found links between eating habits, cognitive function, memory, academic achievement, and psychological well-being (Kang, Choi, and Jung, 2020).

Self-efficacy refers to an individual's beliefs about how to perform the actions required handling the situation. Self-efficacy also influences an individual's performance, indicating how much effort they will put in and how insistent to solve the problem (Qudsyia & Irma, 2016). Dietary self-efficacy referred to an individuals' perceptions of their abilities to make appropriate food choices (Cangöl, 2018).

Adolescents with stronger nutrition-specific self-efficacy have a better chance of changing their diet than those with lower nutrition-specific self-efficacy. The higher one's self-efficacy in the area of healthy eating, the more likely they are to adopt healthier eating habits. Self-efficacy is linked to both behavioral change and maintenance. One of

the enabling elements influencing dietary choices is the recognition of barriers to change (Efthymiou, et al., 2021).

Perceived barriers to healthy eating have three common aspects personal, environmental, and social barriers. Personal perceived barriers include financial and cultural factors, environment perceived barriers are often linked to availability and affordability of healthy nutritious food and social perceived barriers are often associated with poor support from family members, friends and peers (Qiu, 2018).

Other barriers that may influence adolescent healthy dietary choices include nutrient consumption, the desire for independence, acceptability by peers, increased mobility, more time spent at school, preoccupation with self-image, busy schedules and adolescents may skip meals, and all these factors contribute to adolescent eating behavior that might be irregular and unhealthy (Sanyaolu, Okorie, Qi, Locke, & Rehman, 2019).

School health nurse has crucial role by providing health education that improves adolescent physical and mental health. School health nurses can also keep track of an adolescent's growth and development, teach them about nutritional health issues, collect statistics on their nutritional health, analyze adolescent nutritional status and educate teenagers about healthy eating habits (Kolbe, 2019).

Significance of the study:

Adolescents require special care because they account for one-fifth of the global population, with 84 percent living in developing nations, because of

the growth surge, psychological, sexual maturity, and cognitive development that occur during this period, adolescents are also vulnerable to poor nutritional status if they do not satisfy their increased nutritional needs. Adolescent's nutritional status is exacerbated by increased physical activity paired with poor eating habits (WHO, 2022). Adolescents' poor dietary habits have an impact on their current health by causing nutritional issues such as obesity and anemia, which are becoming increasingly prevalent in Egypt, with 34.7 percent of adolescents overweight or at danger of becoming overweight, and 17.6 percent obese. Anemia and other micronutrient deficient illnesses affect 54 percent of adolescents, resulting in growth retardation and lower immunity to disease. Those dietary habits may influence not just adolescent's current health, but also they may develop diseases like cancer and other chronic diseases later in life (Salem & Said, 2017), so the main intent of the present study was to assess adolescents' self-efficacy and perceived barriers toward healthy eating habits in Port Said city.

Aim of the study:

To assess adolescents' self-efficacy and perceived barriers toward healthy eating habits in Port Said city.

Research question:

1. What are the dietary habits among adolescents in preparatory schools in Port Said city?
2. What are the levels of self -efficacy among adolescents in preparatory schools in Port Said city?
3. What are perceived barriers to healthy eating among adolescents in preparatory schools in

Port Said city?

4. Is there a correlation between dietary habits, self-efficacy, and perceived barriers among adolescents in preparatory schools in Port Said city?

Subject and methods

Research Design:

This study employed a cross-sectional research design.

Study Setting:

This study was conducted at five preparatory schools, selected randomly from five districts of Port Said city. These were: El Nasr preparatory school for boys (which includes 5 classes for grade one with a total number 187 students and 5 classes for grade two with a total 196 students) representing El Manakh district. Port Said preparatory school for girls (which includes 6 classes for grade one with a total of 219 students and 5 classes for grade two with a total of 209 students) represents EL Arab district. El Canal preparatory school for boys (which includes 12 classes for grade one with a total of 538 students and 13 classes for grade two with a total of 572 students) representing El Shark district; El Zohor preparatory school for girls (which includes 7 classes for grade one with a total of 246 students and 7 classes for grade two with a total of 283 students) representing El Zohor district; and Gamal Abd El Naser preparatory school for girls (which includes 8 classes for grade one with a total of 279 students and 8 classes for grade two with total students of 300) representing El Dawahy district.

Target population:

The population targets were students at the preparatory schools in Port Said city.

Sample sizes:

Sample size was statistically calculated by using the equation of Steven Thimpsons equation at 95% confidence power of the study, (Dawson-Saunders and Trapp, 2001).

$$n = \frac{N \times P(1-P)}{(N-1) \times (d^2 / Z^2) + P(1-P)}$$

n=Sample size

N=Total society size (3900 students) d=error percentage = (0.05)

P=percentage of availability of the character and objectivity= (0.5)

Z= the corresponding standard class of significance 95%= (1.96).

The final sample size was calculated to be 350 students

Sampling:

In this study, a multistage random sampling technique was applied as follows: Port Said city had five districts namely El Manakh district, EL Arab district, El Shark district, El Zohor district, and El Dawahy district. A sampling frame was developed to include a list of all governmental preparatory schools in the five districts; one preparatory school from each district was chosen at random base; and two classes from each school were randomly chosen: one class from first grade and one class from second grade. The study was comprised of 350 students.

Tools for data Collection:

First tool: A dietary questionnaire:

It was developed by Turconi, et al., (2008), it was translated from English to Arabic language by an expertise in English language and reviewed and tested by a five expertise in nursing. It was used to gather data about dietary habits. The questionnaire is split into two sections: the First section included data related to demographic characteristics of the studied students as age, gender, rank, family income and crowding index. The second section concerned with dietary habits. It composed of 17 questions. It was designed to assess dietary habits of adolescents, specifically breakfast content, number of meals per day, and daily fruit and vegetable consumption.

Scoring system:

The response designed with three likert scales "always", "sometimes" and "never". It was analyzed as follows a value of (3) was attributed to always, a value of (2) was attributed to sometimes and a value of (1) was attributed to never. The total score of dietary habits was 51points, classified into good dietary habits $\geq 60\%$ (31-51points), meanwhile bad dietary habits $< 60\%$ (0-30points).

Second tool: Self-efficacy scale:

It was developed by Kang, (2009); it was translated from English to Arabic language by an expertise in English language to suit the students, and reviewed and tested by a five expertise in nursing. It was used to determine how much a student may assume attitudes that would improve their nutritional health. It contained 7 questions.

Scoring system: Each question based on three response options: "No", "I don't know", and "yes" which scored as 1, 2 and 3 respectively. Better

scores were linked to higher self-efficacy. The total score was 21. The score classified in to low level (0–16) referring to "incapacity for using advice aimed at improving one's well-being," , moderate level (16–19) referring to "sufficient capacity for using advice aimed at improving one's well-being," and high level (19–21) referring to "good capacity for using advice aimed at improving one's well-being."

Third tool: Perceived Barriers to Healthy Eating (PBHE):

It was used to assess adolescent's perceived barriers toward healthy eating. The Arabic version of questionnaire was used in this study, it was developed by Musaiger, et al, (2013). It was composed of ten questions. It included two main parts:

Part I: Personal and environmental obstacles to eating well .It consisted of six questions designed to determine whether adolescents are sufficiently informed about a healthy diet, motivated to or enjoy eating healthy foods, have skills to plan and shop for preparing or cooking healthy foods, have access to healthy foods, and are unable to purchase expensive healthy foods.

Part II: Social barriers to healthy eating, it was consisted of four questions that were used to determine whether the adolescent hadn't support from parents, friends and teacher or hadn't time to prepare or eat healthy foods.

Scoring system:

Response options for all perceived barriers statements were three options not a barrier, a somewhat important barrier, and a very important

barrier. It was analyzed as follows: A value of (3) was attributed to very important barrier, a value of (2) was attributed to a somewhat important barrier and a value of (1) was attributed to not a barrier. The higher score indicated high perceived barriers to healthy eating.

Validity:

A panel of five professionals from community health nursing specialty revised the tools for clarity, relevance, comprehensiveness, understanding, and applicability. All of the tool's study content variables were valid, according to the experts.

Tool reliability:

Cronbach's Alpha for dietary habits ranged from a low of 0.55 to a high of 0.75. The Pearson correlation, which is used to determine test-retest reliability, was quite high. The coefficient alphas for the entire self-efficacy scale were $\alpha=0.92$. Reliability between tests is 0.70. The perceived barriers to healthy eating Cronbach's alpha was $\alpha=0.85$.

Pilot Study:

The pilot study was carried out on 10% of the entire study sample which represent 35 studied students who selected randomly from preparatory school. The pilot students were not included in the study sample. The pilot study's goal was to assess the clarity, simplicity, and usefulness of data collection tools, as well as the time allotted to complete the designed tools. Students completed the study tool within 35-45 minutes.

Field Work:

Firstly, official approval was obtained to conduct the study and get data about preparatory schools. After having the agreement of Port-Said Education directorate, one preparatory school was chosen randomly from each district. The researchers visited each school to gain school manager cooperation after explaining the study's objective and significance of the study as well as to determine a suitable time for data collection based on student daily schedules. Each school was visited two days per week from 9 a.m. to 12 p.m. The researchers were directed to student classes in each school. Two classes have been chosen randomly from the first and second academic levels. The researchers explained the aim of the study and obtained oral consent from each student in each class. In addition, the researchers explained the instructions to use the study tools and students were allowed to ask any questions or clarifications. The students were informed that all data acquired would be kept private and used strictly for research purposes. The study questionnaire was filled out by students and took 35-45 minutes to fill out. The process of data collection lasted two months, started in October and accomplished in November during school year 2020-2021.

Administrative Design:

Dean of the Faculty of Nursing at Port Said University sent an official letter and clarified the purpose of this study to the Director of Port Said Educational Administration; to obtain permission to conduct the study in the selected schools of each district. Then the researchers explained the study's

aim to the manager of the selected school and coordinated the appropriate time to start the study.

Ethical Considerations:

The research consent was obtained from the Scientific Research Ethical Committee of faculty of nursing, Port-Said University before starting the study. An approval was obtained from Port-Said Education directorate and the manager of a selected preparatory school where the data was collected. Each student's consent to participate in the study was obtained orally. Students were informed about the study's purpose and what would be done with the results prior to data collection. The students were informed that they have the right to withdraw from the study at any moment. They were also informed that the information would be kept private and solely utilized for research purposes. Ethics, values, culture, and religious convictions were all upheld.

Data analysis

Data was sorted, coded, and analyzed using the SPSS software package version 23.0. The qualitative data was described using numbers and percentages. Quantitative data was described using the mean and standard deviation. To see how different groups compared on category variables, the Chi-square test was utilized. Independent t-tests were used to compare two independent populations with normally distributed data, while F-tests (ANoVA) were used to compare more than two populations. Correlations between two quantitative variables were measured using the Pearson coefficient. In ordinal data, the Spearman

coefficient was employed to analyze the associations between two variables. Multivariate liner regression was used to investigate most independent factor that affect variables. The significance of the obtained data was determined at a 5% level.

Results

Table (1): Showed that 51.7% of the studied students aged <12 years with Mean \pm SD 11.53 ± 1.11 , 70.6% of the studied students are female and 38.3 % was ranked the first according to birth order. Concerning, crowding index, the findings revealed that, Mean \pm SD was 1.94 ± 0.74 . Eventually, the results depicted that, 55% of the studied students reported insufficient monthly income.

Figure (1): Elaborated that 85% of the studied students reported having good dietary habits, while 15% of the studied students informed having bad dietary habits.

Figure (2): illustrated that 50,50% of the studied students had moderate self-efficacy, while 24.80% of the studied students had low self-efficacy and only19.70% had high self-efficacy.

Figure (3): portrayed perceived barriers to healthy eating, 46% of the studied students reported personal and environment barriers to healthy eating, 63.2% stated social barriers and the total perceived barriers to healthy eating was 51.7%.

Table (2): showed that there was statistically significant correlation between self-efficacy and perceived barriers. No other statistical significant correlation could be identified $p \leq 0.05$.

Table (3): revealed that there was statistical significant correlation between crowding index and perceived barriers. No other statistical significant correlation could be identified $p \leq 0.05$.

Table (4): Explained multiple linear regression models for factors affecting dietary habits, self-efficacy and perceived barriers among studied students. As noticed birth order and average monthly household income were the most affecting predictors where ($p = <0.001$). None of the other socio-demographic factors had a significant effect on the dietary habits, self-efficacy and perceived barriers.

Table (1): Distribution of the studied students according to demographic data (n = 350).

Items	No.	%
School		
El Nasr preparatory school for boys	66	18.9
Port Said preparatory school for girls	79	22.6
El Canal preparatory school for boys	70	20
El Zohor preparatory school for girls	68	19.4
Gamal Abd El Naser preparatory school for girls	67	19.1
Age		
<12	181	51.7
≥ 12	169	48.3
Min. – Max.	10.0 – 15.0	
Mean \pm SD.	11.53 ± 1.11	
Gender		
Male	103	29.4
Female	247	70.6
Birth order		
First	134	38.3
Second	117	33.4
Third	64	18.3
Fourth	33	9.4
Fifth	2	0.6
Crowding index		
Min- Max.	0.50 – 6.0	
Mean \pm SD.	1.94 ± 0.74	
Average monthly household income		
Sufficient	158	45
Insufficient	192	55

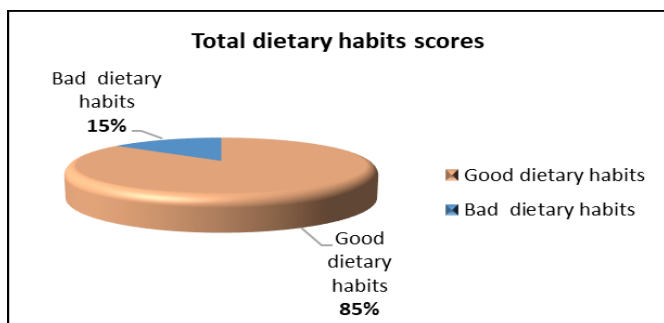


Fig (1): Distribution of the studied students according to total dietary habits scores (n=350)

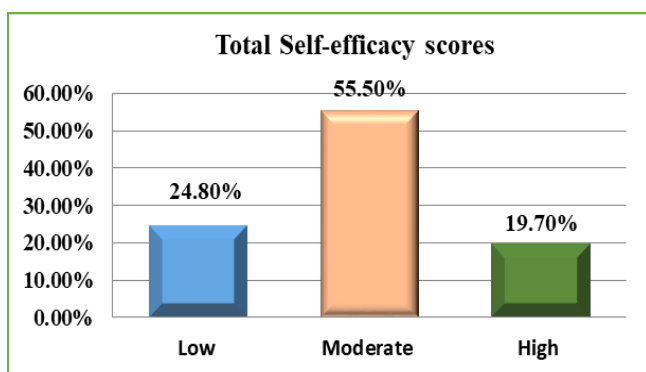


Fig (2): Distribution of the studied students according to total self-efficacy scores (n=350)

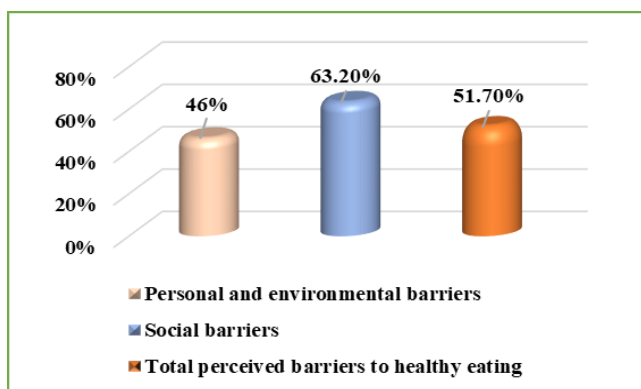


Fig (3): Distribution of the studied students according to perceived barriers (n=350)

Table (2): Correlation between eating habits, self-efficacy and perceived barriers (n = 350)

Variables	r	p
Dietary habits VS Self-efficacy	0.026	0.632
Dietary habits VS perceived barriers	0.063	0.238
Self-efficacy VS perceived barriers	-0.377*	<0.001*

Table (3): Correlation between dietary habits, self-efficacy and perceived barriers with demographic data (n = 350)

Items		Dietary habits	Self-efficacy	Perceived barriers
Age (years)	r	-0.093	0.006	-0.028
	p	0.082	0.916	0.605
Gender	r	-0.088	0.086	-0.079
	p	0.101	0.109	0.142
Crowding index	r	-0.084	0.023	-0.110*
	p	0.117	0.662	0.040*
Average monthly household income	r	0.001	0.032	-0.086
	p	0.990	0.555	0.110

r: Pearson coefficient *: Statistically significant at $p \leq 0.05$

Table (4): Multiple linear regression models for factors affecting dietary habits, self-efficacy and perceived barriers

	β	SE	Beta	t	P-Value	95.0% CI
Constant	10.905	1.626		6.708	.000	(1.01–1.25)
Age	.153	.073	.125	2.082	.038	(1.13–2.21)
Birth order	.245	.110	.146	2.235	<0.001*	(1.32–2.84)
Crowding index	.080	.090	.059	.891	.374	(1.15–1.98)
Average monthly household income	-.045	.034	-.076	-1.343	<0.001*	(1.64–3.05)

$R^2 = 0.509, \chi^2 = 8.99, df = 8 (p < 0.001)$

Discussion

Nutrition and healthy eating are essential components for adolescent health. Adolescence is vulnerable life phase for poor eating habits which can lead to obesity, diet-related diseases and high incidence of false dieting behaviors which contribute to nutritional inadequacies in addition to development of eating disorders. Healthy eating is associated with reduced risk for many diseases leading death as heart disease, cancer, stroke, and

diabetes Abd El-Rahman, Aly & EL-Bastawesy, (2013). Adolescents start to take an active role during adolescence years, adapted to take the responsibility for their decisions and establish healthy behaviors that will help to enhance their current and protracted health. Marks, Barnett, Strugnell, & Allender (2015), so the present study has been carried out to assess adolescents' self-efficacy and perceived barriers toward healthy eating habits in Port Said city.

The current study findings elaborated that majority of the studied students reported having good dietary habits, while one fifth of them informed bad dietary habits. This may be due to the majority of adolescents have a sufficient level of awareness about healthful and non-healthful food, fast food danger on health and family's broad impact on the family members by providing appropriate and quality fulfillment of nutritional intake. Adolescent concern regarding body image, good body appearance, and even being ideal are the strongest determinants of good dietary and eating habits.

On the same track a descriptive study on 190 students in Jakarta, Indonesia showed that most of adolescents have good dietary habits Fatikhani & Setiawan, (2019), in addition to Al-Beltagy, (2008) research conducted in Egypt regarding dietary habits among adolescents in El-Gharbia Governorate revealed that the majority of the adolescents adhered to good dietary patterns both in urban and rural areas. The current results were nearly similar to results which reported that most of school-age children have good dietary habits Spronk, Kullen, Burdon, & O'Connor, (2014).

This explained that adolescent's awareness of good nutrition is crucial to adolescent quality of life and well-being, according to a global study noted that adolescent good nutrition ensured correct growth and development in the future Fleming, et al. (2020). This point out that early adolescence period allows a positive lifestyle routine that will help them during adolescence and throughout their live Hockenberry & Wilson (2015).

In contrast to the current study results it was found that many of researches about adolescent dietary habits found that adolescents preceded unhealthful eating standards, eating a lot of sweets, fast foods and lower proportion fruits and vegetables Rippin, et al. (2019), also a study on 1026 students aged 14 to 16 years in Kolkata, India reported poor dietary intakes and poor food consumption patterns among adolescent Rathi, Riddell, & Worsley, (2017). The findings of the study highlighted an urgent necessity to provide educational programs about healthy eating habits in early adolescence period.

Adolescents encounter barriers and challenges regard to healthy eating as awareness of a healthful diet, personal preferences and the desire to consume junk food, moreover the high cost of healthy foods, various social and environmental factors. The present study revealed that almost half of studied students reported personal and environmental barriers to healthy eating, while more than two thirds stated social barriers to healthy eating. The cause for this may possibly due to low motivation to eat healthy foods, lack friend support for eating healthy diet or engaging physical activity in addition healthy food need

more preparation time as well as adolescent spending more time outside the home, they have more incentives to earn bad nutritional choices during school socializing, adolescent usually choose foods that loaded in sugar, salt and fat. Adolescents prefer quick, easy-to-prepare foods that require little or no cooking due to busy school schedules and have many educational activities.

This result goes in line with Rabie , Shehata, Hasan & Shihab (2019) study which showed that nearly two thirds of the participants prefer healthy eating but reported barriers to healthy eating, almost two third of students' families don't know how to prepare foods in a healthy way , don't have time to make healthy foods, and students think that healthy foods cost too much, in addition to Musaiger,etal, (2013) study in seven Arab countries which indicated that there were a variety of cultural, societal, and environmental barriers faced adolescents to adopt healthy diet and physical activity in Arab nations, and these barriers differed considerably between males and females for each country, as well as the result supported by Kelly, Callaghan & Gabhainn, (2021) who reported that adolescents financial restrictions can impact their food choices as personal barrier. Adolescents had identified the need for accurate nutritional data and enhanced food preparation facts to adopt healthier food standards Ziegler, et al. (2021). So, it was recommended to develop health intervention that encourage healthy eating practices and reduce different barriers to healthy eating.

Self-efficacy is considered necessary for behavior modification as well as preservation of recently adopted behaviors. It promotes trust in one's ability as well as the belief to achieve particular tasks, or psychological attitude Bas & Donmez (2009). Implementing self-efficacy is critical to guarantee healthier food choices and positive dietary habits among adolescents because formed eating habits during adolescence are likely to continue into adulthood Pearson, Ball & Crawford (2011).

According to the present study results, more than half of the studied students had moderate self-efficacy; meanwhile one quarter of them had low self-efficacy. This may be due to adopting healthy dietary patterns ,in particular with respect to eating healthy food and eating proper regular diet, a wide proportion of adolescents claimed to eat junk foods when they were out with their friends, despite being aware of the harmful impacts of such foods Kotecha, etal, (2013). Equivalent with the existing findings, a study conducted by AlGhanim & Alkazemi, (2021) in Kuwait which indicated that half of the studied sample had moderate self-efficacy, and minor percent had high self-efficacy, moreover Bani-Issa, etal (2020) study in the United Arab of Emirates among school students revealed that participants reported moderate self-efficacy as well as eating self-efficacy affect adolescents' participation in health promoting behaviors.

In a discrepancy with the above mentioned findings Fitzgerald, Heary, Kelly, Nixon, &Shevlin, (2013) study results revealed that adolescents aged 13-18 years had higher level of

self-efficacy which linked to a higher consumption of healthy foods. Self-efficacy is a key target for different strategies aimed at encouraging adolescents to adopt healthier lifestyle as well as trying to overcome obesity growing crisis among adolescent in particular therefore the researchers recommended educational sessions for adolescent to help them to improve eating self-efficacy.

The contemporary work showed that there was a significant correlation between self-efficacy and perceived barriers to healthy eating and there is no other statistically significant correlation could be identified. This may be related to eating self-efficacy is influenced by a variety of personal and environmental factors such as attitudes toward health, awareness regard healthy food, perceived behavioral control, and peers concerns. Similar to the foregoing current study results, a study was conducted among 410 students in United States of America revealed a correlation between eating self-efficacy and perceived barriers for healthy food choice Muturi, et al, (2016), furthermore Szabo & Piko (2019) study findings concluded that perceived barriers had a negative relation with self-efficacy. In contrast to current study findings ALGhanim & Alkazemi, (2021) revealed positive association between self-efficacy and dietary habits.

The current study results disclosed that most predictor factors affecting dietary habits, self-efficacy and perceived barriers are birth order and average monthly household income, none of the other socio-demographic variables had any impact on dietary habits, self-efficacy and perceived barriers. Perhaps it's because more than half of the

studied students had in sufficient income, which considered greater barriers to healthy eating, often, low income families choose to spend their monthly budget on cheap and high calorie food rather than fruits and vegetables.

The existing study's findings agree with Abdel-Hady, El-Gilany, & Sarraf, (2014) study that clarified social classes had a significant effect on taking unhealthy dietary elements ,additionally El-Bagoury, Hassan & AbouSeif (2017) study among adolescent's students in Egypt, indicated that there is no relationship between eating habits and personal data of studied students such as age, sex and school ,in the same track another study proved that low-income populations encounter unhealthier food environments, fewer food stores, and lack access to healthy food resources Rossen, (2014).

CONCLUSION

In deduction, it is evident from the current study results that the majority of the studied subjects reported having good dietary habits; more than half of the studied subjects had moderate level of self-efficacy, and more than two thirds reported social barriers for healthy dietary habits. There was statistically significant correlation between self-efficacy and perceived barriers, meanwhile there was no other statistically significant correlation could be identified.

RECOMMENDATIONS

From the previous findings, the researchers suggested the following recommendations

1. Develop customized nutritional interventions to raise adolescent awareness and encourage them

to adopt healthy eating habits.

2. Implement school educational programs by school health nurse about healthy dietary habits and health problems associated with poor diet.
3. Conduct health programs that target eating self-efficacy and improving eating habits during early adolescence period.
4. Develop health intervention programs to reduce various barriers to healthy eating and to strengthen facilitators of healthy eating practices among adolescents.
5. Parental health education programs to encourage parents to provide nutritious foods to their children on a regular basis for better health.
6. Investigate interpersonal impacts on healthy eating, such as family, peer group and social support.
7. Further studies should be conducted among students at all levels of schooling in the country to determine eating habits, self-efficacy and perceive barrier.

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