

## Collegians' Self-Efficacy of Adhering to Health Diet

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### Abstract

*Background: Based on research conducted in the United States, the process of shifting from high school to college necessitates children to adapt to a novel setting. Failure to make appropriate adjustments may have adverse effects on individuals' weight status and subsequent health-related behaviors. University experience is a critical phase associated with an increased likelihood of weight gain.*

*Objective(s): This study aims to assess collegians' Self-Efficacy of adhering to health diet.*

*Methodology: This study was guided by descriptive predictive design. The predictive correlational design is used to establish strength and direction of relationships between or among variables, with the intention of predicting the value of one of the variables based on the value(s) of one or more other variable(s). Predictive correlational research uses the terms independent and dependent to refer to its principal variables. The independent variable (or variables) is also called a predictor. The dependent variable is the one whose value or occurrence the researcher wants to be able to predict.*

*Results: The result of this study reveals that there is no gender-wise statistically significant difference in the Self-Efficacy for adherence to healthy diet.*

*Conclusion: The study concluded that the Maintainers feel more confident about adhering to a healthy diet as they have been used to doing so even though they were in pleasurable surrounding. The Maintainers feel more confident about adhering to a healthy diet as they have been used to doing so even though they are in unpleasurable surrounding.*

*Recommendations: The study recommended continued advocacy at the cities and national levels is needed to make changes and further strengthen public health efforts. Establish Social Liberation which impedes public's from adhering to healthy diet.*

**Keywords:** Collegians, Self-Efficacy, Health Diet.

## INTRODUCTION

A wide range of interconnected elements, including those of a psychological and social character, are connected to human behavior with relation to food [1]. Emotions operate as a mediator between all acts and thoughts. For instance, in addition to the urge to eat, emotions such as enjoyment and rage or melancholy can serve as motivation for eating [1].

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Gibson [2] demonstrated that depressive thoughts and depression have an impact on eating. Although eating less is the typical reaction to stress, some studies have found [3] have demonstrated that eating more is also a symptom of atypical sadness understanding the variables that affect food choices is crucial if we want to promote a healthy adjustment in dietary habits [1], [4]. Maintaining the body's nutritional levels and providing the pleasure that comes from eating through the production of serotonin and dopamine are crucial for human life [1].

According to United States research, transitioning from high school to college requires children to adjust to a new environment. If they don't adjust properly, this might negatively affect their weight status and subsequent health behaviors. University is a vital period for weight gain [5].

The development of healthy behavior from infancy and adolescence might significantly affect the likelihood of developing diseases later in life. Young individuals frequently embrace unhealthy health practices many studies from around the world have examined various health behaviors, such as: transportation safety, violence, smoking, the use of alcohol and illegal drugs, sexual behavior, eating, weight control, and the practice of physical exercise. Between 1990 and 2000, studies reported on changes in the health behavior of young European university students showing a trend towards a less healthy lifestyle [6].

The eating habits of students significantly affect their weight in addition to physical activity and sedentary behavior according to study performed at US colleges, students were not following dietary recommendations for fruit and vegetables and were instead consuming more high-fat items [5].

Butler [7] also noted significant decreases in the intake of bread and vegetables. Significant predictors of students' eating habits were identified as being access to and availability of (healthy food alternatives) [5].

College students have poor dietary habits, eating more fast food and fried foods than the recommended five servings of fruit and vegetables per day [8]. According to the study referenced by the American College Health Association [9], just 7.3% of students eat five or more servings of fruits and vegetables per day. As students adjust to college life, their eating habits frequently deteriorate, which can result in weight problems, especially in the first year of college or university, and last into later years of life [10].

## **METHODOLOGY**

### **Study Design**

This study was guided by the descriptive predictive design. The predictive correlational design is used to establish strength and direction of relationships between or among variables, with the intention of predicting the value of one of the variables based on the value(s) of one or more other variable(s). Predictive correlational research uses the terms independent and dependent to refer to its principal variables. The independent variable (or variables) is also called a predictor. The dependent variable is the one whose value or occurrence the researcher wants to be able to predict [11].

### **The Setting of the Study:**

The study was conducted at Thi Qar University. The subjects were recruited from six colleges in this university which College of Computer Science and Mathematics, college of Administration and Economics, College of Education for Pure Sciences, College of Engineering, College of Media and College of Human Education.

## Sample and Sampling

The study included a non-probability convenience sample of (400) college students from the aforementioned colleges who agreed to participate in this study. Researchers often use convenience sampling, where any subjects who meet the eligibility criteria and are willing to participate in the study are included. In convenience sampling, subjects are included in the study because they happen to be in the right place at the right time [11].

The study participants were collected from the four stages of the six colleges mentioned above and the student researcher enters the available subjects until he reaches the required sample.

The sample size was determined based on a margin of error of 5%, a confidence level of 95%, a population size of 9088, and a response distribution of 50%. Thus, the recommended sample size would be 369. The final sample size is 400.

## Inclusion Criteria

Undergraduate students, both sexes, and morning study participants were the criteria used to select the study participants for the present study.

## Exclusion Criteria

The researcher excluded students at colleges with health specializations.

## Data Collection

Data was collected using a self-reported instrument. Data were collected from the period from January 15th, 2023, to February 4th, 2023.

## Statistical Analyses

Data were analyzed using the statistical package for social science (SPSS) IBM, version 26. Descriptive statistical measures of frequency were used to describe the study participants' sociodemographic characteristics. The arithmetic mean and standard deviation were also used. The inferential statistical measures of stepwise regression which was used to predict which independent variables can predict more the dependent variable (Stages of Change for adherence to healthy diet), the independent-sample T-Test which was used to investigate the differences in the dependent variable (Stages of Change for adherence to healthy diet) when the independent variable is dichotomous (gender), and the one-way analysis of variance (ANOVA) which was used to investigate the differences in the dependent variable (Stages of Change for adherence to healthy diet) when the independent variable encompasses three or more categories.

## Ethical Considerations

After receiving the approval of the College of Nursing, University of Baghdad for the study, the student researcher discussed study details with officials at the University of Thi Qar. The general purpose of the study was explained to the participants, as well as how to complete the questionnaire, to ensure that they understand that participation is optional and that they can drop out at any time. The student researcher informed participants that their data would be kept private and secure throughout and after their participation in the study. The student researcher further assured study participants that their identities will remain anonymous in the presentation, reporting, and/or any eventual publication of the study.

## Pilot Study

Completing a pilot study is an essential step that saves difficulty later when the final steps of the research process are implemented. A pilot study may be conducted with several different aims, such as no prior research has been conducted on the topic, thereby making the power analysis difficult to perform. A pilot study will help to estimate the effect sizes needed for an accurate power analysis [11]–[13]. The pilot study was conducted on a

sample of 60 undergraduate students. The aims of a pilot study may also assist with identifying problems that may interfere with study validity or challenges in using the instruments. The time that the study participants needed to answer all items was 20-25 minutes. All items were clear for the study participants.

## RESULTS OF THE STUDY

Table (1): Gender-wise differences in Self-Efficacy for adherence to healthy diet

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper	
Positive Affect	Equal variances assumed	.035	.851	1.114	398	.266	.53664	.48163	-.41022	1.48351
	Equal variances not assumed			1.109	178.883	.269	.53664	.48377	-.41799	1.49127
Negative Affect	Equal variances assumed	1.575	.210	-.482	398	.630	-.19517	.40458	-.99055	.60022
	Equal variances not assumed			-.519	208.148	.604	-.19517	.37607	-.93656	.54623
Habit Situations	Equal variances assumed	.601	.438	.593	398	.553	.29678	.50009	-.68637	1.27993
	Equal variances not assumed			.579	172.630	.563	.29678	.51256	-.71492	1.30847
Social Cues (Social Situations)	Equal variances assumed	.717	.398	.922	398	.357	.57926	.62839	-.65611	1.81464
	Equal variances not assumed			.904	174.134	.367	.57926	.64084	-.68555	1.84407
Self-Efficacy	Equal variances assumed	.022	.882	.895	398	.371	1.21752	1.36011	-1.45638	3.89141
	Equal variances not assumed			.902	182.709	.368	1.21752	1.35038	-1.44682	3.88185

df: Degree of freedom; Sig.: Significance; Std. Error Difference: Standard Error Difference; t: T-Statistics

The study results reveal that there is no gender-wise statistically significant difference in the Self-Efficacy for adherence to healthy diet.

Table (2): Differences in the Self-Efficacy domains among grade groups

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
Positive Affect	Between Groups	54.069	3	18.023	1.009	.389
	Within Groups	7073.369	396	17.862		
	Total	7127.438	399			
Negative Affect	Between Groups	50.708	3	16.903	1.348	.258
	Within Groups	4965.969	396	12.540		
	Total	5016.678	399			
Habit Situations	Between Groups	29.773	3	9.924	.515	.672
	Within Groups	7637.337	396	19.286		
	Total	7667.110	399			
Social Cues (Social Situations)	Between Groups	84.197	3	28.066	.923	.429
	Within Groups	12036.580	396	30.395		
	Total	12120.778	399			

Self-Efficacy	Between Groups	56.650	3	18.883	.132	.941
	Within Groups	56719.788	396	143.232		
	Total	56776.438	399			

df: Degree of freedom; F: F-Statistics; Sig.: Significance

The study results reveal that there is no statistically significant difference in the Self-Efficacy domains among the grade groups.

## DISCUSSION

The study results reveal that there was a statistically significant difference in the Self-Efficacy among the socioeconomic class groups. Further post-hoc analysis revealed that participants whose families are classified as upper middle socioeconomic class feel more confident about adhering to healthy diet. This finding can be explained as these participants could be exposed less to situations tempting for consuming unhealthy diet since less than half of them are first graders as mentioned earlier.

The study results reveal that there was a statistically significant difference in Positive Affect among the Stage of Change groups. Further post-hoc analysis demonstrated that the value of Positive Affect was greater among participants who are in the Maintenance Stage of Change and lesser among those who are in the Precontemplation Stage of Change. This finding implies that the Maintainers feel more confident about adhering to healthy diet as they have been used to do so even though they were in pleasurable surrounding. While those in the Precontemplation as Glanz [14] state that individuals may be in this stage since they are not informed enough about the consequences of their behavior, or they may have tried to change a number of times and become demoralized about their abilities to change. Further cross-tabulation demonstrates that more than a third of participants in the Precontemplation are first graders which implies that they could not have sufficient information on the deleterious consequences of unhealthy diet.

The study results exhibited that there was a statistically significant difference in Self-Efficacy among the Stage of Change groups. Individuals in the Preparation Stage of Change, as DiClemente [15] state, have an intention to engage in a new behavior in the immediate future, usually defined as within the next month. They may have already taken some steps in preparation to change their behavior. This finding implies that these participants feel more confident about themselves in general to adhere to a healthy diet and refrain from unhealthy ones.

The study results reveal that there was a statistically significant difference in the Pros of adherence to healthy diet among the socioeconomic class groups. Further post-hoc analysis revealed that the value of Pros is greater among participants whose families are classified about upper middle socioeconomic class. This finding implies that participants whose families are classified as upper middle socioeconomic class believe that the gains of adhering to a healthy diet outweigh the cost of not adhering to it. In other words, these participants view that adhering to healthy diet regardless of whatever its taste was, would be more useful for them even though the unhealthy diet was more tasteful, tempting to them.

The study results reveal that there was a statistically significant difference in the Cons of adhering to healthy diet among the socioeconomic class groups. Further post-hoc analysis revealed that the value of Cons is greater among participants whose are in the Precontemplation. This finding implies that participants. The TTM postulates that to progress from contemplation, Cons should decrease [14]. This implies that the Cons would be greater among individuals who are in lower Stages of Change. As mentioned earlier, as individuals be in the Precontemplation Stage of Change since they do not have sufficient information on the consequences of a given unhealthy behavior (not adhering to

healthy diet) or they may not even recognize that they need to change a particular behavior. This implies that they do not have sufficient information on the consequences of not adhering to a healthy diet.

## **STUDY LIMITATIONS**

The student researcher addressed some limitations including using a self-reported tool for data collection which involves the subjectivity rather the desired accuracy of such data. Moreover, the study involved a convenience sample which involves not every element of the population has an opportunity for selection in the sample and less representative of the target population than are randomly selected samples (Gray & Grove, 2021).

## **CONCLUSION**

The Maintainers feel more confident about adhering to a healthy diet as they have been used to doing so even though they were in pleasurable surrounding. The Maintainers feel more confident about adhering to a healthy diet as they have been used to doing so even though they are in unpleasurable surrounding. Participants who are in the Preparation Stage of Change feel more confident about themselves adhering to a healthy diet whatever the social situation was. Participants, in the Preparation Stage of Change, feel more confident about themselves in general adhering to a healthy diet and refraining from unhealthy ones.

## **RECOMMENDATIONS**

Continued advocacy at the cities and national levels is needed to make changes and further strengthen public health efforts to establish Social Liberation which impedes public's from adhering to healthy diet. Community health nurses need to cooperate with the universities administrations to encourage the cafeterias' owners to offer healthy receipts with prices sponsored by the universities.

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