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THE EFFECTS OF COMMUNAL EATING ON PERCEIVED SOCIAL SUPPORT AND ACADEMIC SUCCESS IN FIRST YEAR COLLEGE STUDENTS

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ABSTRACT

First-year students living in collegiate residence halls (n=303) completed a survey about dining center usage and perceived social support, and granted access to first semester grade point average (GPA) and dining center usage data. Participants reported social benefits of eating with others and eating in the dining center. A significant positive relationship was noted between frequency of eating in the dining center and GPA (p=0.000). Frequency of eating with others was found to be significantly positively correlated to perceived social support (p=0.000). Frequency of eating with others was significantly positively correlated with GPA for males (p=0.046) and females (p=0.020).

Keywords: Communal Eating, Social Support, Academic Success, College Foodservice

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INTRODUCTION

More than two million students live in collegiate residence hall facilities across the United States each year (US Census Bureau, 2003). Many of these students routinely consume meals at an on-campus dining center. Therefore, dining centers have the potential to impact student health. Most of the research related to collegiate dining centers has focused on the foods chosen and consumed in the dining center, and food safety. Due to the multidimensional nature of health (Espelage, Hale, & Hannum, 2005) each aspect of health (physical, mental, and social) must be investigated in each setting with potential to influence overall health and well-being. Effects beyond the physical implications of eating in a dining center seem likely. Unfortunately, little research has been conducted to determine the role of the collegiate dining center in the mental and social health and academic success of students.

Research has been conducted on family meals and the role that eating together plays during a child's development. There are multiple physical health benefits related to consuming family meals (Croll, Hannan, Neumark-Sztainer, Perry, & Story, 2003; Gillman et al., 2000; Koszewski, Behrends, Nichols, Sehi, & Jones, 2011). Family meal research has extended beyond physical health and nutrition to show that family meals are a vehicle for social support (Fulkerson, Neumark-Sztainer, & Story, 2006; Mestdag & Vandeweyer, 2005; Neumark-Sztainer & Story, 2005) and that family meals promote the well-being and academic success of children (Eisenberg, Olsen, Neumark-Sztainer, Story, & Bearinger, 2004).

Some research has been conducted on the benefits of eating meals with others in elderly patients with dementia. Most studies on this

topic focus on the nutritional benefits and improved eating patterns of dementia patients who dine with others. However, there is evidence that when patients with dementia dine with caretakers, there is an increased perception of social support by caretakers (Keller, Edward, & Cook, 2007) and measurable improvements in the eating behaviors, resident-resident interaction, and mood of the patients with dementia (Charras & Fremontier, 2010).

Overall, social support is important for health. General social support has been defined as 'any interpersonal or social relationship that might promote health and wellbeing' (Cohen, Gottlieb, & Underwood, 2000; Sarason, 1990). There is evidence that social support and interpersonal relationships contribute to mental and physical health and wellbeing (Cohen et al., 2000; Sarason, 1990). Additionally, research shows a positive relationship between social support and physical health (Espelage, Hale, & Hannum, 2005).

Social support is important throughout life. Social support in children has been linked with better academic adjustment and GPA (Causey, et al., 1991). Familial social support provided by family meals has also been found to be related to more positive academic outcomes (Eisenberg, et al., 2004). Social support in college students (DeBerard et al., 2004) has also been found to be positively correlated with GPA.

Social support is extremely important for college students' health and well being (Assouline, Colangelo, Cole, Cutrona, & Russell, 1994; Eisenberg & Hefner, 2009; Sumi, 2006). Interpersonal support was found to be positively related to increased mental health and decreased symptoms of psychological distress, including depression and symptoms of loneliness in Japanese college students (Sumi, 2006). College students in the United States have demonstrated much higher incidence of depression when social support is low (Eisenberg & Hefner, 2009). In Eisenberg and Hefner's research 1,378 students at a large, public university took an online survey based on the Multidimensional Scale of Perceived Social Support to evaluate the relationship between mental health and social support (2009). Results indicated that students with a lower perceived social support score were at six times the risk of depressive symptoms (Eisenberg & Hafner, 2009). Social support from parents has been linked to higher college GPA (Assouline, et al., 1994). In Assouline's research 418 undergraduate students completed a survey based on the Social Provisions Scale- Parent Form. The study found that parental support significantly predicted GPA for both males and females (Assouline, et el., 1994). These studies demonstrate the importance of social support for physical and psychological health and well-being.

Current literature shows that collegiate dining centers have an impact on health (Adams & Colner, 2008; Brown et al., 2005; Hoffman et al., 2006; Holm-Denoma et al., 2008). Adams and Colner's research found that both male and female college students who lived in the residence halls had a greater intake of fruit and vegetables than students living off campus (2008). Brown et. al found that having a prepaid meal plan was related to increased intake of fruit, vegetables,

and meat based on 3-day dietary assessments of 503 undergraduate students (2005). According to Holm-Denoma's research, women and men gained 3.5 and 4.0 lbs respectively in their first semester of college (2008). Hoffman found a mean weight increase of 2.86 pounds from fall to spring semester for college freshmen (2006). Despite the wide variety of studies that have been conducted related to collegiate dining, there has been little research on the social and psychological role of communal meals in collegiate dining centers.

Gender differences are often found in research that focuses on social support. Colarossi found that female adolescents reported having a greater number of supportive friends and receiving more frequent support from friends compared to male adolescents (2001). Numerous studies have demonstrated differences in GPA between males and females. Epstein's book, *Failing Boys, Issues in Gender and Achievement,* included material from many studies that have found males to have lower achievement (including GPA) compared to their female counterparts (1998).

The present study collected fall semester GPA for first-year freshmen in addition to data regarding perceived social support, dining center usage, and frequency of eating with others in a dining center. The purpose of this study was to investigate the possibility that communal meals in a collegiate dining center and eating with others may be related to perceived social support and GPA for first-year students living in the residence halls. This study will also explore potential differences in the aforementioned relationships between male and female participants.

METHODOLOGY

Elements of the Survey Instrument

A survey was created based on the primary variables of interest (frequency of eating in the dining center, frequency of eating with others, perceived social support, and GPA). The survey included 50 multiple choice questions. All questions were written by the primary researcher except for the questions in the final section of the survey which were part of the Short Form of the Interpersonal Relationship Inventory (Tilden, n.d.). The first 11 questions were used to collect demographic information including gender, year in college, race/ ethnicity, extracurricular involvement, hall of residence, and number of roommates. The next section of the survey included 13 questions pertaining to the participant's university dining center usage. This section sought information including: number of meals eaten per week, number of meals taken out of the dining center to eat per week, and number of times per week one sat with friends at the dining center. This section also included four questions about how eating in the dining center made the student feel:

- Even though there are people sitting near you in the dining center, how often do you feel lonely or alone while in the dining center?
- When you are sitting alone in the dining center, how often do you feel lonely?
- Does eating in the dining center make you feel more socially connected?
- Does eating in the dining center make you feel less lonely?

The final section of the survey was the Short Form of the Interpersonal Relationship Inventory (Tilden, n.d.) used with permission from the author. The Short Form of the Interpersonal Relationship Inventory includes 26 Likert scale items. Thirteen of the items are summed to yield a social support score. The remaining 13 questions are used to calculate a conflict score. The Interpersonal Relationship survey was created in 1983 and has been validated and refined by a number of subsequent studies (Tilden & Stewart, 1985;

Tilden & Galyen 1987; Tilden, Nelson, & May, 1990a; Tilden, Nelson, & May, 1990b; Weinert & Tilden, 1990; Tilden, Hirsch, & Nelson, 1994). This survey has been assessed for validity and reliability in samples including students, cancer patients, weight-control patients, HMO subscribers in health education classes, adults in the community, pregnant women, battered women, bereaved elderly, and active duty female service members (Tilden & Stewart, 1985; Tilden & Galyen 1987; Weinert & Tilden, 1990; Nayback-Beebe & Yoder, 2011).

The methodology for this project was approved by the Committee for Research Involving Human Subjects at Kansas State University.

Pilot Study

A pilot study was administered in paper format to 50 students at a dining center on a different part of campus than the primary study. Forty-six of 50 students completed the pilot survey. The population of college students surveyed in the pilot study did not overlap with the participant pool used for the primary study. Due to feedback from the pilot study, the order of the survey sections was reversed. The order of the sections for the final version of the survey was as follows: perceived social support (Interpersonal Relationship Inventory Short Form), followed by dining center usage information, and ending with demographic data. One question from the pilot study was not included in the final version of the survey because it was too similar to another question on the survey. Two questions (age and estimated first semester grade point average) were added to the demographic section of the final study. The final version of the survey included 50 multiple choice and one short answer question (age).

Data Collection

The final version of the survey was sent electronically to all first-year students living in one residence hall complex in early November, 2011. These students (n=1,554) received an email asking them to participate in a research survey about the dining centers and to grant access to their first semester GPA and dining center usage data. Participants were informed that, if they completed the survey, they would be entered in a prize drawing for free laundry money for the spring semester or gift cards redeemable at housing convenience stores. The survey remained open for one week. During that week two reminder emails with links to the survey were sent to students. Responses from participants answering a majority of the survey questions were included in the data analysis.

Independent Variables

The actual dining center usage data set was used to calculate average number of meals consumed per week for students who granted access to this information. For students who did not grant access to this information, the self-reported value for the question, "How many meals do you eat in the dining center in a typical week? Include breakfast, lunch, and dinner meals" was used as the meals per week data point. The frequency of eating with others was based on the response to the question, "How many times per week do you sit with friends in the dining center? Include breakfast, lunch, and dinner."

Dependant Variables

The actual first semester GPA issued by the university was used for all participants who granted access to this information. For participants who did not grant access to their first semester GPA and students whose actual GPA could not be obtained, an estimated GPA was imputed based on the student's self-reported first semester GPA and the actual GPA of other participants who self-reported the same GPA. Using this method, the researcher was able to obtain a valid

approximation of GPA for each participant. Perceived social support score was calculated based on the responses to questions on the Short Form of the Interpersonal Relationship Inventory (Tilden, n.d.).

Data Analysis

All data analysis was conducted using PASW Statistics 18, Release Version 18.0.0 (© SPSS, Inc., 2001, Chicago, IL, www.spss.com). Each of the following correlations was calculated once using all participants combined and a second time for males and females separately.

- · Dining center usage x GPA
- Dining center usage x social support score
- Frequency of eating with others x GPA
- Frequency of eating with others x social support score
- Dining center usage x frequency of eating with others
- · Social support score x GPA

In addition to these correlations, 2-way analysis of variance was used to test the following null hypotheses:

- Mean grade point averages for different levels of dining center usage by gender are not significantly different
- Mean social support scores for different levels of dining center usage are not significantly different by gender
- Mean grade point averages for different levels of frequency of eating with others are not significantly different by gender
- Mean social support scores for different levels of frequency of eating with others by gender are not significantly different

Preparing the Data for Analysis

Real dining center usage data was available for the majority of participants (n= 289). For students who did not grant access to this information (n=14), the self-reported value for question 10 ("How many meals do you eat in the dining center in a typical week? Include breakfast, lunch, and dinner meals.") was used as the meals per week data point. The correlation between actual meal usage and question 10 responses was 0.685 (p= 0.00) indicating a strong positive correlation.

The actual first semester grade point average issued by Kansas State University was used for all participants who granted access to this information (n= 266). For participants who did not grant access to their first semester grade point average (n=37) and students whose actual grade point average could not be obtained (n=20), an estimated grade point average was imputed based on the student's self-reported first semester grade point average and the actual grade point average of other participants who self-reported the same grade point average on the survey. For students who granted access to their grade point average, the correlation between actual grade point average and estimated grade point average was 0.702 (p=0.00). Using this method, the researcher was able to obtain a valid grade point average for all but one participant. Grade point averages ranged from 1.07 to 4.0.

Most participants fully completed the questions related to social support (n=298) and conflict (n=298). For the participants who responded to at least 10 of the 13 questions in a given section, the social support or conflict score was imputed based on the average response to the answered questions for that portion of survey.

RESULTS AND DISCUSSION

A total of 216 students completed the online survey. Since a sample size of a 309 was needed for adequate power (based on a population of 1553, an alpha of 5%, and a beta of 95%), paper copies of the final version of the survey were administered during lunch (n= 28) and dinner (n=61) two days after the online survey closed. Eighty nine additional paper surveys were completed by freshmen students living

in the complex who had not completed the survey online, resulting in a total of 303 survey responses. The mean social support score and GPA were not significantly different for people who took the survey online and those who took the paper version (df=1; F= 0.069; p=0.79 and df=1; 0.524; p=0.47 respectively). Demographic variables for those who took the survey online versus in paper were very similar (Bauer, 2012). Therefore, data from participants who completed the survey online and data from participants who completed the paper format of the survey were combined and analyzed together.

Participant Demographics

In total, 303 participants completed at least 10 of the 13 questions for each scale on the Interpersonal Relationship Inventory. All participants were first-year students living in the residence hall complex. This sample was comprised of 61% females (n=209). Participant age ranged from 17-21 years, with an average age of 18.3 years. Most (85.1%) participants identified as Caucasian (n=285), 4.6% identified as African American (n=14), 4.6% identified as Asian (n=14), and 2.6% identified as Hispanic (n=8). Most (77.2%) participants reported living with one roommate.

Population Demographics

Sample demographics were representative of the population composition of all first-year students living in the complex in fall 2011. Of the first-year freshmen living in the complex at the time of the study, 59% were female and the average age was 18.4 years. Responses were distributed representatively among the halls. Halls with the highest and second highest number of first-year freshmen residents yielded the highest and second most survey responses, respectively. The majority of first-year freshmen students living on campus live in standard rooms with one roommate, which was also reflected in the sample. The racial-ethnic demographics of the population were not known, but the sample was representative of the overall demographics of university first-time freshmen students. In fall semester 2011, 79.0% of first-time freshmen self-identified as White, 5.15% as African American, 1.85% as Asian, and 5.77% as Hispanic (Kansas State University Fact Book, 2011).

Qualitative Findings

Four survey questions were constructed to gauge participants' feelings and perceptions of eating in the dining center.

- 1. "Even though there are people sitting near you in the dining center, how often do you feel lonely or alone while in the dining center?" Most participants (76.9%) reported they are rarely or never lonely when people are sitting near them in the dining center. A minority of participants (20.5%) reported they are sometimes or often lonely even when there are people sitting near them in the dining center. Males and females answered this question similarly.
- 2. "When you are sitting alone in the dining center, how often do you feel lonely?" About one-third (32.0%) of participants reported they are sometimes or often lonely when sitting alone in the dining center, and 43.6% of participants reported they were rarely or never lonely when sitting alone in the dining center. Nearly a quarter (23.8%) of participants indicated they "never sit alone in the dining center." Females were more likely to report often or sometimes feeling lonely. Males were more likely to report rarely or never being lonely when sitting alone.
- 3. "Does eating in the dining center help you feel more socially connected?" The majority of participants (62.4%) indicated that eating in the dining center made them feel more socially connected. Only 11.2% of respondents indicated that they did not feel that eating in the dining center made them feel more socially connected. Males and females responded similarly to this question with a slightly larger percentage of females giving a response of "unsure."

Table 1: Summary of Correlations for All Participants						
		Grade Point	Social Support	Dining Center	Eat With Others	
		Average	Score	Usage		
Grade Point	Pearson Correlation	1	0.162	0.221	0.086	
Average	Sig. (2-tailed)		0.005*	0.000*	0.138	
	N	303	301	303	301	
Social Support	Pearson Correlation	0.162	1	-0.019	0.184	
Score	Sig. (2-tailed)	0.005		0.745	0.001*	
	N	301	301	301	300	
Dining Center	Pearson Correlation	0.221	-0.019	1	0.468	
Usage	Sig. (2-tailed)	0	0.745		0.000*	
	N	303	301	303	301	
Eat With Others	Pearson Correlation	0.086	0.184	0.468	1	
	Sig. (2-tailed)	0.138	0.001	0		
	N	301	300	301	301	

^{*}Significant relationships

4. "Does eating in the dining center help you feel less lonely?" Almost half (44.9%) of participants answered yes, 28.4% were unsure, and 26.1% reported eating in the dining center did not help them feel less lonely at all. Males and females responded similarly to this question with a slightly larger percentage of female respondents indicating they were unsure if eating in the dining center helped them feel less lonely.

Quantitative Findings

Dining Center Usage x GPA: The correlation for the relationship between dining center usage and GPA for all students was 0.221 (p=0.000) indicating a significant positive relationship between dining center usage and GPA for the sample as a whole (See Table 1). A significant positive relationship was also noted for males alone (r=0.306, p=0.003) and females alone (r=0.291, p=0.000) (See Table 2 & Table 3). There was no interaction between gender and dining center usage (df=3; F=0.728; p=0.536). The means of GPA for the different levels of dining usage were statistically significant (df=3; F=9.576; p=0.048). The mean GPA for the different levels of dining usage for males and females was significantly different (df=1; F=29.046; p=0.005) with females having a higher GPA than males.

Dining Center Usage x Perceived Social Support: Dining center usage and perceived social support were not significantly correlated for the combined group (r= -0.019, p=0.745), males alone(r=0.082, p=0.429), or females alone(r= -0.005, p= 0.946) (See Table 1, Table 2, & Table 3). There was no interaction between gender and dining center usage (df=3; F=0.958; p=0.413). Means of social support scores for the different levels of dining center usage were not statistically significant

(df=3; F=0.254; p=0.855). Means for different levels of dining usage for males and females were not statistically significant (df=1; F=6.843; p=0.060).

Frequency of Eating with Others x GPA: The correlation for the relationship between frequency of eating with others and GPA for all students was not significant (r=0.086, p=0.138) (See Table 1). However, when looking at males and females separately, significant relationships were noted. For males alone, the Pearson Coefficient was 0.206 (p=0.046) and for females alone the correlation was 0.162 (p=0.020) (See Table 2 & Table 3). There was no interaction between gender and frequency of eating with others (df=4; F=0.468; p=0.759). The means of GPA for the different levels of eating with others were not statistically significant (df=4; F=3.690; p=0.117). The means for the different levels of eating with others for males and females were statistically significant (df=1; F=21.100; p=0.000) with females having a higher GPA than males.

Frequency of Eating with Others x Social Support: There was a significant positive correlation between the frequency of eating with others and social support for all students (r=0.495, p=0.000), males alone (r=0.325, p=0.001), and females alone (r=0.458, p=0.000) (See Table 1, Table 2, & Table 3). There was no interaction between gender and frequency of eating with others (df=4; F=0.677; p=0.608). The means of the social support scores for the different levels of eating with others were not statistically significant (df=4; F=4.533; p=0.086). The means for the different levels of eating with others for males and females were statistically significant (df=1; F=11.632; p=0.005) with females having a higher average perceived social support score than males.

Table 2: Summary of Correlations for Females						
		Grade Point	Social Support	Dining Center	Eat With Others	
		Average	Score	Usage		
Grade Point	Pearson Correlation	1	0.219	0.291	0.162	
Average	Sig. (2-tailed)		0.002*	0*	0.02*	
	N	209	207	209	207	
Social Support	Pearson Correlation	0.219	1	-0.005	0.264	
Score	Sig. (2-tailed)	0.002		0.946	0*	
	N	207	207	207	206	
Dining Center	Pearson Correlation	0.291	-0.005	1	0.458	
Usage	Sig. (2-tailed)	0	0.946		0*	
	N	209	207	209	207	
Eat With Others	Pearson Correlation	0.162	0.264	0.458	1	
	Sig. (2-tailed)	0.02	0	0		
	N	207	206	207	207	

^{*}Significant relationships

		Grade Point	Social Support	Dining Center	Eat With Others
		Average	Score	Usage	
Grade Point	Pearson Correlation	1	-0.058	0.306	0.206
Average	Sig. (2-tailed)		0.579	0.003*	0.046*
-	N	94	94	94	94
Social Support	Pearson Correlation	-0.058	1	0.082	0.218
Score	Sig. (2-tailed)	0.579		0.429	0.035*
	N	94	94	94	94
Dining Center	Pearson Correlation	0.306	0.082	1	0.325
Usage	Sig. (2-tailed)	0.003	0.429		0.001*
J	N	94	94	94	94
Eat With Others	Pearson Correlation	0.206	0.218	0.325	1
	Sig. (2-tailed)	0.046	0.035	0.001	
	N	94	94	94	94

^{*}Significant relationships

CONCLUSIONS AND APPLICATIONS

The results of this research suggest there are significant relationships between variables of interest measured and analyzed in this study. There was a positive correlation between frequency of eating in a collegiate dining center and GPA for the sample as a whole and for males and females alone. Frequency of eating with others in a collegiate dining center setting was positively correlated to the GPA for males and females alone, but not the sample as a whole. Frequency of eating with others in a collegiate dining center setting was positively correlated to perceived social support score for the sample as a whole and males and females alone.

A positive relationship was noted between frequency of eating in the dining center and frequency of eating with others for all participants and males and females alone. Because most participants reported typically dining with others, it is generally the case that the more one eats in the dining center, the more one eats with other people. Although the variables of frequency of eating in the dining center and frequency of eating with others seem similar, it is important to note that these two variables measured different aspects of the dining experience. This is supported by the differing relationships between these variables and perceived social support. Perceived social support was found to be related to eating with others, but not related to frequency of eating in the dining center.

In addition to noted differences in GPA, there are also differences in perceived social support between genders, with females having higher perceived social support scores than males. Dining center usage is positively related to GPA. Frequency of eating with others is positively related to GPA and perceived social support. These relationships lend support to the underlying hypothesis that eating in the dining center and eating with others is related to positive mental health and wellbeing. More research is needed to determine if dining center usage and/or eating with others is causally related to social support and/or higher academic achievement.

Study Strengths

Completing a pilot study with participants who did not overlap with the primary population of interest ensured that the sample for the main study was not contaminated. The feedback and data from the pilot study were useful in determining questions that could be deleted, questions that needed to be added, and organizing the survey to have a better flow. The final version of the survey was administered to the target population at an ideal time in the academic year. Surveys were completed in early November 2011.

This time frame for survey completion was planned to be late enough in the year that students had established dining habits. If the survey was administered any later in the semester, students may have been distracted by Thanksgiving break or finals. This could have resulted in a much lower response rate or disruption of typical dining habits.

Participants who completed the survey were a good representation of the population of interest. The proportion of males and females who completed the survey was nearly identical to the gender ratio in the residence hall complex. Similarly, the number of respondents from each hall was proportionally consistent with the number of first-year students who were living in the hall at the time of the survey. The racial/ethnic composition of the sample reflected the overall population of first-time freshmen students at the university.

Study Limitations

The overall number of survey respondents was six participants (2%) short of the power calculation. Having a higher survey response rate would have strengthened the findings in this study. The fact that some of the students did not complete every question on the survey is also a weakness. It would have also been desirable to have more male survey respondents. However, the percentage of male respondents (39%) was consistent with the demographic of the population (41% male). It would also have strengthened the results if data had been collected at multiple institutions of higher education to determine if the results of this study are applicable to college freshmen as a whole.

The most important weakness of this study is that it reflects analysis of data collected at only one point in time. Without collection of data at multiple points in time, it is impossible to determine a potential direction of causality within these relationships. Another limitation of this study is that response to the survey was voluntary. There may have been response bias and differences between those who responded to the survey and those who did not respond. It is possible that students with higher GPAs were more likely to participate in the survey, which could have skewed survey results. If more studies are conducted on this topic, it may be helpful to control for GPA when conducting the data analysis.

Implications

The present study can be used as support for the benefits of communal dining and eating in the collegiate dining center. More than 60% of participants surveyed indicated that eating in the dining center made them feel more socially connected. Almost half (44.9%) of the participants in this study indicated that eating in the dining

center helped them feel less lonely. Colleges, universities and dining centers could use this information as an additional selling point for collegiate dining center meal plans. Academic advisors and success coaches could also use this information as another tool to help students acclimate and academically achieve in college.

Additional research is needed to clarify the relationships of interest in the present study. It could be that people who feel more socially supported to begin with are more likely to eat with others in college. It is equally plausible that people feel more socially supported when they eat with others. An intervention-type study could better explain this relationship.

Similarly, an intervention could be conducted to further clarify the relationship between frequency of eating in the dining center and GPA. It would be difficult to conduct this study with students already living and eating in the dining center. However, if a group of off-campus students agreed to eat at the dining center a certain number of times per week and GPA data were collected at the start and finish of the study, changes in GPA could be investigated. This type of study would probably be time and cost prohibitive since GPA is only assigned twice a year. Classes and many other aspects of college life change semester to semester. Therefore, it would be nearly impossible to design and implement an experiment to demonstrate that a single variable such as frequency of eating in the dining center causes students to have a higher GPA.

The sample of participants in the present study was comprised of first-year students living the residence halls at a single mid-western university. Similar research would need to be conducted at multiple institutions of higher education to be able to generalize the findings of this study to first-year college students in the United States as a whole. It would be helpful for future research to include off-campus students and upperclassmen to see if the relationships found in the present study could be extrapolated to the larger population of university students. This research marks some of the first investigations into the relationship between eating with others in a collegiate dining center setting and psychological and academic outcomes in college students. Although this research leaves many unanswered questions, it can be used as background and fuel for further research in this field.

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