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ABSTRACT

A study was designed to determine the following: (1) if concepts associated with eating disorders are being addressed in home economics courses; (2) through what context the concepts are presented; and (3) if the following variables affect whether, with which emphasis, and in what context the teacher presents concepts--having previous personal and/or academic experiences, the number of years of teaching experience, and teacher's level of educational attainment. From a stratified random sample of 368 home economics teachers, 266 completed a questionnaire containing demographic information and eating disorder concepts. Most teachers included these topics in their classroom teaching. Having previous personal and/or academic experiences increased the likelihood that a teacher would address the concepts with greater emphasis as well as increased the ability to recognize a student with an eating disorder. The variable most likely to affect variety in context of presentation was previous academic experience. Teacher's level of educational attainment had no effect on emphasis or context of concept presentation. (NLA)

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A Study Investigating How Concepts Associated with Eating Disorders Are Addressed in a Preventative Context in the Home Economics Classroom

by

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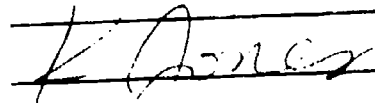
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**"A Study Investigating How Concepts Associated with Eating Disorders are Addressed in a Preventative Context in the Home Economics Classroom."**

Within the past 20 years the problem of eating disorders has by some estimates reached epidemic proportions within the female population age range of 12 to 30 years. National chapters on eating disorders **Anorexia Nervosa and Associated Disorders (ANAD)** and **Anorexia Nervosa and Related Eating Disorders (ANRED)** report up to 20% of this population groups are experiencing a major eating disorder, specifically anorexia and/or bulimia. Because traditional therapeutic efforts to treat these disorders have for the most part been unsuccessful - a number of efforts have been aimed at developing prevention programs. And because the largest portion of those afflicted with eating disorders other than obesity are high school age females, the schools in particular have been suggested as targets for preventive program delivery and effort for eating disorders. A number of researchers have pointed out the significant role home economics teachers could have in any comprehensive prevention efforts for eating disorders.

Assumptions of the present study were:

- 1) that the subject of eating disorders is a topical area pertinent to subject matter areas normally covered in the home economics classroom;
- 2) that knowledge about concepts associated with eating disorders (negative consequences, healthy eating, dieting principles, stress management and personal worth) will reduce the risk of an eating disorder developing; and,
- 3) that home economics teachers believe that the topic of eating disorders should be addressed in vocational home economics classroom.

The specific research objectives were as follows: To determine

- 1) if concepts associated with eating disorders are currently being addressed in home economics courses;
- 2) through what context the concepts associated with eating disorders are presented;
- 3) if having previous personal and/or academic experiences with eating disorders; and/or if the number of years teaching experience; and/or how the teachers level of education attainment affects whether and with which emphasis and in what context the home economics teacher presents eating disorder concepts in the classroom.

In the absence of an existing instrument, a two part questionnaire was developed.

Section one used a checklist requesting demographic information about the teacher respondents and their classroom. Section two used a likert scale, a checklist and a fill in the blank form that required respondents to indicate the degree of emphasis given to particular eating disorder concepts and the context of the inclusion. Reliability using the Crombach coefficient alpha technique was calculated to be .97 (for the 36 item concepts). The sample for this study included vocational home economics teachers from 43 states and Washington, D.C. A "stratified random sample" of 368 research respondents was drawn from the population of 4,641 home economics teachers who are members of the National Association of Vocational Home Economics Teachers. The sample size was determined necessary to provide a confidence level of .95.

266 (72%) responses were received by the cut-off date. 54.6% reported completion of at least a Masters Degree. The majority of respondents (89.7%) indicated they had taught home economics 7 years or more. 168 (63.3%) of respondents reported having been

personally affected by and/or known of someone affected with an eating disorder. Sixty-two percent indicated that they had received previous academic experience with the topic of eating disorders. 62.6% of these teachers reported affirmatively that eating disorders were a problem with their students and another 7.2% described eating disorders to be a common to large problem. (84.5%) of the teachers indicated they specifically address the topic of eating disorders in their classroom teaching. It was from these 212 or 84.5% of the teachers that information related to eating disorders concepts emphasis and context could be ascertained.

Research Question Number One. Are concepts associated with eating disorders currently being addressed in vocational home economics courses? Twenty-two of the 36 concepts were taught by more than 90% of the teachers. The following concepts were most frequently reported to be given no coverage within each concept category: Laxative abuse in the symptoms category; individual psychology in the cause category; electrolyte imbalances in the consequences category; and coping with family relations and stress in the prevention category. Three 2 X 2 chi square tests were performed concerning the influence of previous experience. Results indicated each previous personal experience, previous academic experience, and their combination explained a significant amount of variance on whether the topic of eating disorders was presented.

Research Question Number Two. Through what context are concepts associated with eating disorders presented? Respondents chose from Foods and Nutrition Unit, Family Relations Unit, Consumer Education Unit or "other" which included 16 other responses. All concepts within the cause category were reported as being included to some degree by at least 45% of the respondents in a Foods and Nutrition Unit, by 49% of the teachers in Family Relations

Unit. All concepts within the consequences category were indicated as being included by at least 54% of the teachers in a Food and Nutrition Context; by a minimum of 14% of the respondents in a Family Relations Unit. All prevention category concepts were reported as being presented in a Foods and Nutrition context by at least 43.6% of the respondents; by at least 36% of the teachers in a Family Relations context.

Both the general concepts of anorexia and bulimia were reported as being presented in a Food and Nutrition Unit by 90% of the respondents. Both concepts were reportedly included in a Family Relation context by 36% of the teachers.

### Previous Experience

The Multivariate Analysis of Variance (MANOVA) procedure was used to explain the variance in emphasis given to concepts based on the demographic variables of previous experience. Results indicated a univariate effect attributable to previous personal experience on the following 12 concepts; compulsive exercising, purging, bingeing, depression, overachievement, perfectionism, social emphasis on ideal; family system stressors, electrolyte imbalances, malnutrition damage, abnormally low body weight and metabolic changes. Results indicate a univariate affect on emphasis attributable to previous academic experience on the following 18 concepts: compulsive exercising, emotional hunger, depression, isolation, overachievement, perfection, social emphasis on ideal, family system stress, amenorrhea, electrolyte imbalances, dental deterioration, malnutrition damage, metabolic changes, fatality, awareness of medias influence on self image and eating habits, coping with stress, dealing with family stresses, and anorexia. Twelve of those 18 concepts were each demonstrated to be emphasized to a greater degree by those teachers who reported having

previous personal or academic experiences than by teachers who reported neither of these previous experiences of compulsive exercising, depression, isolation, overachievement, perfectionism, social emphasis on ideal, family system stressors, electrolyte imbalances, dental deterioration, malnutrition damage, abnormally low body weight, and metabolic changes. The concepts of purging and bingeing were discovered, based on the Scheffe procedure, to be emphasized to a greater degree by teachers reporting previous personal experience than by teachers indicating no previous personal experience. The following concepts were found, based on the Scheffe procedure, to be given greater emphasis by teachers reporting having had previous academic experience with the topic than by those who had not had this prior academic experience of emotional hunger, heredity, amenorrhea, fatality, awareness of medias influence, coping with stress, family system and stressors, and anorexia. Results demonstrated both a multivariate and univariate effect based on the personal experience variable for the consequences concept category in the context of Foods and Nutrition. Results additionally indicated both a multivariate and univariate effect explaining the variances found in the context of "other" for each of the 5 concept categories. Specifically, univariate effects demonstrated the previous academic experience variable alone made a significant contribution in explaining the variance for each of the 5 concept categories (symptoms, cause, consequences, prevention and general topic) in the context of "other". Additionally, results indicated univariate effects of interaction (personal by academic) for symptoms, cause, and prevention categories concepts in the context of "other". Scheffe procedure found teachers reporting to have previous academic experience on the topic were significantly more likely to address cause, consequences, prevention and general topic



category concepts in an "other" context than were respondents indicating a lack of such prior academic experience.

### Teaching Experience

A 2 X 4 Chi square test was performed. Four categories were used (0-3) (4-6) (7-9) (10 or higher). Results indicated years of teaching home economics failed to explain a significant amount of the variance concerning whether the eating disorder concepts were presented. The MANOVA procedure was used to investigate variance in emphasis. No statistically significant differences could be discovered in the emphasis. The results indicated a multivariate effect in the context of presentation attributable to years teaching for the symptoms and consequences category concepts in the context of consumer education. Scheffe in the context of consumer education procedure did however demonstrate that teachers reporting teaching home economics 4-6 years were significantly more likely to present consequences category concepts in the context of consumer education than were teachers reporting 3 years or less or 7 years or more of teaching home economics.

Does the number of years teaching or having previous academic experience with eating disorders affect the emphasis given and in what context eating disorder concepts are presented? Results indicated a univariate effect attributable to having previous experience on 5 concepts; bingeing, depression, overachievement, perfectionism and malnutrition damage. Results indicate a univariate effect attributable to the number of years teaching on 2 concepts - laxative abuse and purging. No univariate interaction effects were significant. Scheffe's procedure further explained the significant results as follows. The concepts of bingeing, purging, depression, overachievement, perfectionism and malnutrition were each



discovered to be given greater emphasis by those teachers reporting to have had previous experiences with eating disorders. The concepts of laxative abuse was additionally discovered, based on Scheffe procedure, to be given significantly greater emphasis by teachers who indicated 7-9 years teaching home Economics than by those indicating 10 + years teaching. Neither previous experience and/or years teaching experience were found to explain any variance in the context of concept presentation.

Does the teachers level of education attainment affect whether, with which emphasis, and in what context eating disorder concepts are presented? Results demonstrated that the teacher's level of educational attainment failed to explain a significant amount of the variance concerning whether the home economics teachers presents eating disorder concepts in the classroom. The MANOVA procedure was used. Four categories of educational attainment were included: 4 years, masters, specialist, and doctoral. The results failed to demonstrate a single significant multivariate effect for any concept emphasis according to the teachers educational attainment level. The MANOVA procedure was employed to explain the variance in the context of the sum concept categories presented according to the independent variable teachers education attainment level. Scheffe procedures failed to further explain this finding.

#### Summary

The majority of the vocational home economics teachers included eating disorder topics and a majority of the concepts associated with eating disorders in their classroom teaching. The most common context for inclusion of the majority of concepts was in a Foods and Nutrition Unit. Having previous personal and or academic experiences with eating

disorders significantly increased the likelihood a teacher address the concepts with greater emphasis as well as increased their ability to recognize an eating disordered student. The variable most likely to affect variety in context of presentation was previous academic experience. The context most generally affected by previous experience was "other" with those teachers indicating prior experience more likely to indicate presenting concepts in the context of "other" than were teachers indicating a lack of such prior experience. The teachers level of education attainment was discovered to have no affect concerning whether emphasis or context of concept presentation.

Table 1

Report of Home Economics Teacher Respondents' Previous  
Academic Experience With the Topic of Eating Disorders.

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	Number	Percentage
Yes	156	62.2
No	95	37.8
Missing	15	

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Table 2

Report of Home Economics Teacher Respondents Indicating if  
Eating Disorders Are a Prevalent Problem Among Their Student  
Population.

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	Number	Percentage
Not a problem	72	28.7
Somewhat a problem	139	55.4
A common problem	17	6.8
A large problem	1	.4
Unknown	22	8.8
Missing	15	

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Table 3

Report of Home Economics Teacher Respondents Indicating Ability to Recognize and Method(s) of Recognizing an Eating Disordered Student.

	Number	Percentage
Recognition	157	74.5
Method:		
Student self-report	77	30.8
Appearance	156	62.4
Behavior	126	50.4
Food habits	90	36.0
Attitude	83	33.2

Table 4

Report of Home Economics Teacher Respondents' Previous  
Personal Experience(s) With Eating Disorders.

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	Number	Percentage
Family member	31	12.4
Friend	54	21.5
Self	27	10.8
Student	129	51.4
No personal experience	92	36.7

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Table 5

Summary Report of Chi-square Value of Whether Having Previous Personal or Academic or the Combination of Previous Personal and Academic Experiences with Eating Disorders Affects if the Home Economics Teacher Presents Eating Disorder Concepts in the Classroom.

Concept	<u>Personal Experience</u>				<u>Academic Experience</u>				<u>Combination</u>			
	n	̄	X <sup>2</sup>	Sign.	n	̄	X <sup>2</sup>	Sign.	n	̄	X <sup>2</sup>	Sign.
<u>Overall Topic</u>												
Yes	143	57	9.91	.002*	142	56.6	13.53	.000*	100	68	22.3	.000
No	69	27.5			70	27.9			27	18.2		

\* Alpha level of significance  $\leq$  .05.