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Cultural Factors in Collegiate Eating Disorder Pathology: When Family Culture Clashes With Individual Culture

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Abstract. Objective: The authors evaluated the validity of familial enmeshment (extreme proximity in family relationships) as a risk factor for eating disorders across cultural value orientations. They tested the hypothesis that although familial enmeshment may be a risk factor for eating disorder pathology for (1) participants of non-Asian descent or (2) culturally independent participants, enmeshment will not be a risk factor for (1) participants of Asian descent or (2) culturally interdependent participants. **Participants**: 255 undergraduate women participated. **Methods**: Participants completed questionnaires on cultural value orientations, enmeshment, and eating disorder pathology. **Results**: As hypothesized, enmeshment was related to eating disorder pathology in non–Asian American and culturally independent participants, but not in Asian American and culturally interdependent participants. **Conclusions**: Depending on cultural values, enmeshment may or may not be a risk factor for eating disorders. This study highlights the importance of examining risk factors in the appropriate cultural framework when considering college student mental health.

Keywords: Asian culture, college health, eating disorder pathology, enmeshment, independence, interdependence

Eating disorders are an important health issue in college student populations. Prevalence estimates of eating disorders and disordered eating are higher in college students compared to the general population.[1] This higher prevalence is of particular concern because eating disorders are among the most lethal mental disorders, with mortality rates from anorexia nervosa, for example, exceeding 4 to 5%.[2]

Concurrently, college student populations are becoming increasingly ethnically diverse and multicultural.[3] Cultural issues and how they relate to health are emerging as important issues to study in this increasingly diverse climate. These issues are particularly important because much existing mental and physical health research has been conducted in Western samples and in predominantly Euro-American/White samples.[4]

In the context of culture and college student health, one important research question is what happens when there is a mismatch between one's own cultural values and the cultural values of one's family. Accordingly, the current study investigated whether cultural value mismatches may affect the role of familial enmeshment, a known risk factor for eating disorder pathology.

Enmeshment

Enmeshment is a construct defined as "an extreme form of proximity and intensity in family interactions" and was first conceptualized by Minuchin and colleagues in the context of anorexia nervosa.[5,6(p30)] Enmeshment has been identified as a risk factor for anorexia nervosa[7–9] as well as for a host of other mental disorders and psychosocial stressors, such as depression,[10] marital dysfunction,[11] childhood psychopathology,[12] panic disorder,[13] alexythymia (psychopathology characterized by an inability to label one's emotions),[14,15] adjustment to chronic obstructive pulmonary disease,[16] suicide,[17] and even preterm birth.[18]

Culture

As students acculturate to American culture, they may find themselves in a situation where their own cultural values are at a mismatch with the culture of their family. The current study investigated the role of enmeshment in situations when one's family's cultural values are at odds with one's own cultural values. This type of analysis is particularly important in the realm of enmeshment for reasons outlined later.

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However, it is not enough to simply study the role of enmeshment in eating disorders in different racial or ethnic groups. The nature of today's ever-diversifying college student populations calls for a deeper analysis of the role of specific cultural value orientations in eating disorder etiology (and in any mental illness). Using race or ethnicity as a proxy for cultural values or beliefs may not be appropriate. We took careful note of this and measured each participant's cultural value orientation in addition to conducting analyses on the basis of race/ethnicity.

Independence and Interdependence

Markus, Kitayama, and others[19–23] have characterized two fundamentally separate cultural concepts of self: An independent cultural value orientation that emphasizes separateness and an interdependent cultural value orientation that emphasizes connectedness. Traditionally, members of North American and other Western cultures are thought to be more independent and members of Asian and other non-Western cultures are thought to be more interdependent.[22]

Interdependence has been conceptualized as the idea that the self is intertwined with others. The social context and relationships are what determine the self and regulate behavior. There are 4 main emphases in an interdependent cultural value orientation: (1) external, public features such as status, roles, and relationships; (2) belonging and fitting in; (3) occupying one's proper place and engaging in appropriate action; and (4) being indirect in communication and "reading others' minds." [22]

We compared this description with that of Minuchin et al of the enmeshed family, generally characterized by rigidity, avoidance of conflict, and overprotectiveness: "She is her father's daughter and her brother's sister.... The child is socialized to act as the family expects and feels great responsibility for not embarrassing the family in the eyes of the extra-familial…. She is extremely conscious of herself and keenly alert to other people's signals...her orientation toward life gives prime importance to proximity in interpersonal contact."[6(p53–60)] In the context of an interdependent cultural value orientation, such a family may feel quite natural and not pathological at all. If, however, one holds an independent cultural value orientation characterized by an emphasis on the self as unique and separate from others, such a family may be perceived as intrusive and may pose as a risk factor for eating disorder pathology.

Because members of North American and other Western cultures are characterized as more independent, and members of Asian and other non-Western cultures are characterized as more interdependent, we hypothesized that White/Euro-Americans, African-Americans, and other non–Asian–Americans (but *not* Asian Americans) would show eating disorder pathology in the context of family enmeshment. Further, we concurrently assessed the strength of each individual's interdependence and independence, respectively, and compared this to their levels of enmeshment and eating disorder pathology. This second analysis was important for two[2] reasons. First, our research was conducted with ethnic minorities living in the United States, and thus to assume all Asian Americans, for example, to be interdependent might be incorrect. Second, Singelis and colleagues[24–26] refined the construct of cultural value orientations and demonstrated that interdependence and independence can coexist to differing degrees in the same individual. Thus, although Asian cultures are often typified by interdependence, the presence of interdependence does not preclude independence for members of Asian cultures. To assume members of one culture to only have one type of cultural value orientation may be mistaken, and we took note of this in our analyses by concurrently examining independence and interdependence together in addition to examining race/ethnicity.

METHODS

Participants

The sample consisted of 299 UCLA female undergraduate students. Because eating disorders disproportionately affect women,[27] this study focused on women. Because of incomplete data, 255 participants were included in the analyses below. The mean age was 19.53 years, with an SD of 2.39. All participants received course credit in psychology for completing the study. The ethnicities of the participants included in the data analyses are shown in Table 1.

Measures

Participants first reported their age and race/ethnicity (see Table 1). Eating disorder pathology was measured using the Eating Disorder Examination Questionnaire (EDEQ),[28] the self–report version of the Eating Disorder Examination interview,[29] a widely-used measure of eating disorder pathology because of its high reliability and validity. This measure has 36 items and measures eating disorder pathology in the past 28 days. A sample item is: "Has your weight influenced how you think about yourself as a person?" The standardized alpha for this scale in our sample was .95.

Independence and interdependence were measured using Singelis's Self-Construal Scale (SCS).[24] The SCS is a 24-item self-report scale that measures the two dimensions of independent and interdependent cultural value orientations separately. A sample independence item is: "I act the same no matter who I am with." A sample interdependence item is: "If my brother or sister fails, I feel responsible." The dimensions have been reported to have acceptable Cronbach's alpha levels of .69 and .73, respectively, which is considered to have maximal bandwidth-fidelity trade-off because of the broadness of the construct.[30] We found the standardized alpha in our sample to be .75 for this measure.

The Edinburgh Family Scale (EFS) is specifically designed to capture Minuchin's construct of familial enmeshment.[31] Sample items include, "When somebody in our house gets hurt or upset, we all react," "Family members are very involved in each other's lives," and "We like to smooth things over." We found the standardized alpha to be .57 for this measure in our sample. Note that this standardized

TABLE 1. Participants' Race/Ethnicity (*N* = 255)

Race/ethnicity	*n*	%
Asian American	111	44
European American	64	25
Latina	33	13
Other	33	13
African American	8	3
Not disclosed	6	2

alpha is considered in the "low" range. A low alpha is an issue only in that it depresses correlations between that scale and other measures. That our study reports significant correlations despite this low alpha bolsters our confidence in the effects. Further, the results from a factor analysis we conducted indicate that this scale measures a single construct (ie, only 1 factor with an eigenvalue above 1).

Procedure

All procedures were fully approved by the Institutional Review Board of the University of California, Los Angeles. The procedures of the study were explained to the participants, including the fact that all responses were anonymous, and they were then left alone to read the consent form to avoid coercion. The experimenter then returned to ask participants if they had any questions and obtained a signature for the consent form.

Participants then completed the questionnaires. The questionnaires were presented in random order. Upon completion of the questionnaires, participants were rewarded with research participation credit for an introductory psychology course.

RESULTS

All analyses were conducted using SPSS 14.0 (SPSS Inc, Chicago, IL).

Preliminary Statistics

The mean score of eating disorder pathology for all participants measured by the EDEQ was 38.30 (range: 0 – 90, *SD* = 20.59). The EDEQ is intended to measure a range of eating disturbances, from nonpathological to clinical.[28] Scores of 4 or higher on certain key items (see Table 2) are considered to reach clinical levels of pathology. In our sample, on average, 42.3% of participants scored 4 or higher on these items. This analysis suggests that the sample included an adequate level of eating disorder pathology for the results to be of clinical relevance. We note, however, that in this study, the EDEQ was used as a research instrument and not as a diagnostic tool.

The mean independence score, measured by the SCS, was 4.73 (range: 2.60 – 6.53, *SD* = 0.71), whereas the mean interdependence score was 4.98 (range: 3.27 – 6.67, *SD* = 0.61). The mean enmeshment score, measured by the EFS, was 1.69 (range: 1.22 – 2.41, *SD* = 0.2).

The overall Pearson correlation between the EFS and eating disorder pathology as measured by the EDEQ was marginally significant and quite low ($r = 0.12$, $p = .053$).

The composite EFS was significantly and positively correlated with interdependence, suggesting that enmeshment is related to interdependence ($r = .25$, $p < .001$).

Main Results

First, we examined the relationship between enmeshment and eating disorder pathology by race/ethnicity. We hypothesized that significant correlations between enmeshment and eating disorder pathology should not exist for Asian American participants and should exist for all other participants. As predicted, no correlation emerged between enmeshment and eating disorder pathology in Asian Americans ($r = .05$; $p = .59$), but a significant positive correlation emerged for no–Asian Americans ($r = .21$; $p = .014$).

Further, in line with Singelis's work finding that independent and interdependent cultural values coexist to differing degrees in 1 individual,[24–26,32] we performed a median split to create categories of high or low independence and high or low interdependence scores. Participants were then categorized into 1 of 4 categories of high independence/high interdependence, high independence/low interdependence, low independence/high interdependence, and low independence/low interdependence (see Table 3). We hypothesized that significant correlations between enmeshment and eating disorder pathology should only exist in 1 group: the group with high independence and low interdependence. Indeed, a significant positive correlation emerged only for this cell as predicted ($r = .421$, $p = .002$). For the remaining 3 cells (when independence is low and interdependence is high, or for the low–low and high–high categories), as expected, no relationship between enmeshment and eating disorder pathology was found (see Table 3).

COMMENT

Enmeshment and Minuchin's model of the enmeshed family have formed the basis of the conceptualization of a host of mental disorders, most notably anorexia nervosa. Indeed, in our results we found that enmeshment was associated with eating disorder pathology, though the relationship was only marginally significant ($r = .12$, $p = .053$).

Our first key finding was the significant positive correlation between enmeshment and a measure of interdependent cultural value orientation. Enmeshment and interdependence appear to be related constructs. However, interdependence is not likely to be pathological in all contexts, as it is a cultural value orientation that characterizes entire cultures. Therefore, we postulated that enmeshment is not necessarily pathological when viewed in its proper cultural context and is instead a specific construct that may be pathological only in the context of independent cultural value orientation. In other words, given high enmeshment, only those holding an independent cultural value orientation should show high levels of eating disorder pathology.

TABLE 2. Items on the Eating Disorder Examination Questionnaire Indicating Clinically Pathological Levels of Disordered Eating

Item	% scoring ≥ 4
On how many of the past 28 days have you had a definite fear that you might gain weight or become fat?	41.6
On how many of the past 28 days have you felt fat?	42.4
Over the past 4 weeks, has your weight influenced how you think about (judge) yourself as a person?	39.2
Over the past 4 weeks, has your shape influenced how you think about (judge) yourself as a person?	45.9

Results supported this hypothesis. Enmeshment did not relate to eating disorder pathology in Asian American participants. In non–Asian Americans, however, enmeshment positively predicted eating disorder pathology. Looking specifically at each participant's cultural value orientation, no association between enmeshment and eating disorder pathology emerged for those participants with high levels of interdependence, but a positive association emerged for those participants with high levels of independence and low levels of interdependence.

Limitations of this study include that the data were based on self-report. An alternative explanation to our pattern of findings is that perhaps those who are of Asian descent or, alternatively, low in independence, find it difficult to divulge information regarding their eating disorder pathology. Social desirability is another point of concern, as those who are either of Asian descent or those who are high in interdependence may be particularly sensitive to appearing socially desirable and may have understated their eating disorder pathology. A major strength of this study is that we examined cultural value orientations specifically, in addition to relying on ethnic categories, to parse out the role of culture. This distinction is important given that previous research has often assumed that ethnic minorities retain the culture of their country of origin, without recognizing the constant negotiation that occurs between the culture of the new country and the culture of the country of origin.

TABLE 3. Correlations Between Enmeshment and Eating Disorder Pathology by Independence/ Interdependence Category

	Interdependence	
Independence	High	Low
High	.04 (n = 61)	.42* (n = 52)
Low	.13 (n = 71)	–.02 (n = 71)

*$p < .01$.

Conclusions

Although our current study focuses specifically on enmeshment and eating disorder pathology, we believe our findings attest to a broader issue regarding the history of psychological research. This study has shown specifically that race/ethnicity and cultural value orientations are an important factor in the relationship between enmeshment and eating disorder pathology. One implication is that Minuchin's model of enmeshment may indeed be valid in the independent cultural context in which he studied the etiology of anorexia nervosa. The larger issue—that risk factors for illness may differ between cultures—is illustrated by the fact that participants with different cultural value orientation patterns show different relationships between enmeshment and eating disorder pathology. Thus, the findings demonstrate the vital importance of considering the role of culture in research and clinical investigations into college mental health.

Future research should examine the relationship between cultural values, family values, and eating disorders in males. In addition, these relationships should be studied in the etiology of other mental health disorders for male and female college students. Future research may also benefit from examining the cultural context in which these mental disorders may develop. In other words, as a student acculturates from their native family culture to a potentially different collegiate culture, what processes occur to place students at risk?

The clinical and health education implications of the findings of this study are twofold. First, clinicians who treat collegiate women should pay particular attention to the risk of eating disorders when women of non-Asian descent report enmeshment-related problems with their family. Second, clinicians should pay careful attention to the role of cultural values of their patients and evaluate each client's risk factors in the context of each client's own cultural values.

NOTE

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