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Effects of Family Dynamics on Disordered Eating Patterns and Behaviors: Evidence from Cyprus

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Abstract

The current study aimed a) to examine family dynamics in Cyprus and possible influences on disordered eating patterns and behaviors, b) to assess the relationships between the quality of family dynamics and unhealthy eating practices, and c) to reinvestigate the already established relationship between dieting and problematic eating patterns and behaviors. The sample consisted of 109 females between 18 and 30 years old. The majority of the female participants reported that their families are cohesive and flexible, have low levels of disengagement, enmeshment, rigidity and chaos and high levels of communication with most aspects of their families. However, family satisfaction did not provide clear results. Furthermore, results also indicated a positive relationship between rigidity in families and the measures of eating disturbances. Additionally, and as expected, the results were consistent with the well-known assertion that dieting contributes to the development of disordered eating patterns and behaviors. The current findings offer important additional information to the disordered eating literature of females in Cyprus by providing information of how family dynamics can influence the development of problematic eating patterns and behaviors. The current study supports the need for the implementation of preventive and intervention plans to Cypriot young females and their families which promote healthy eating behaviors.

Keywords: family dynamics, quality of family relationships, disordered eating, rigidity, Cyprus

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Disordered eating patterns and behaviors received significant attention over the years in an attempt to identify the contributing factors for their development. Research suggests that many factors contribute to the development of eating disturbances such as body dissatisfaction (Furnham, Badmin, & Sneade, 2002; Sarwer, Thompson, & Cash, 2005), dieting and fear of fatness (French & Jeffery, 1994; Herman, Polivy, & Leone, 2005; Hsu, 1997; Lowe, 2002; Polivy & Herman, 1985; Russell, 1979; Schmidt, 2002; Wilson, 2002), as well as genetic, individual, cultural, and family factors (Birch, 2002; May, Kim, McHale, & Crouter, 2006; Schmidt, 2002; Tata, Fox, & Cooper, 2001; Tylka & Subich, 2004; Wertheim, Martin, Prior, Sanson, & Smart, 2002). Family is a social agent with an important role in the development of attitudes and behaviors about healthy and unhealthy eating practices. Research has shown that parents directly and/or indirectly initiate body dissatisfaction and even contribute to the development of eating disorders in children (Schmidt, 2002; Thompson, Cattarin, Fowler, & Fisher, 1995). This effect seems to extend into adolescence and early adulthood (Aquilino & Supple, 2001). Additionally, research suggests that disordered eating and negative body image is not a problem of the "Western" world as initially believed, but a cross-cultural phenomenon which significantly affects girls and women in a variety of Non-Western countries including India (Shroff & Thompson, 2004), Singapore (Ho, Tai, Lee, Cheng, &

Liow, 2006), China (Lee & Lee, 2000), United Arab Emirates (Eapen, Mabrouk, & Bin-Othman, 2006), Iran (Gargari et al., 2011) and Cyprus (Argyrides & Kkeli, 2015), to name a few.

Numerous studies have been conducted to examine the relationships and interactions between disordered eating attitudes and behaviors and family dynamics. Within this literature, a lot of contributing factors have been identified such as the quality of family relationships, family dysfunction, poor communication and conflict within the family (Byely, Archibald, Graber, & Brooks-Gunn, 2000; Haworth-Hoeppner, 2000; Wallin, Roijen, & Hansson, 1996; Wisotsky et al. 2003), parent-child interactions that are more conflict-ridden (Archibald, Graber, & Brooks-Gunn, 1999; May et al., 2006), negative food-related experiences (Kluck, 2008), negative verbal weight-related commentaries or weight-related teasing (Ata, Ludden & Lally, 2007; Cash, 1995; Jones, Vigfusdottir, & Lee, 2004; Lieberman, Gauvin, Bukowski, & White, 2001), perceived pressure from parents to be thin (Ata et al., 2007; Field et al., 2001; Stice, Maxfield, & Wells, 2003; Stice & Whitenton, 2002), low cohesiveness and low emotional expression (Haworth-Hoeppner, 2000; Latzer, Hochdorf, Bachar, & Canetti, 2002).

Moreover, research has shown that families that emphasize thinness and appearance are at higher risk of having children practicing unhealthy eating patterns (Davis, Shuster, Blackmore, & Fox, 2004; Kluck, 2010; Laliberté, Boland, & Leichner, 1999). For instance, Kluck (2010) found that college women that came from families where appearance was at a focal point in the family were at higher risk of developing disturbed eating patterns. Additionally, parenting practices such as authoritarianism have also been linked to problematic eating patterns (Cuffe, Mckeown, Addy, & Garrison, 2005; Enten & Golan, 2009; Flett, Hewitt, & Singer, 1995; Gillett, Harper, Larson, Berrett, & Hardman, 2009; Striegel-Moore et al., 2005; Tata et al., 2001). For example, in a study with a clinical population, Enten and Golan (2009) found that a father's authoritarianism and especially rigidity was linked to eating disturbances. Similarly, Gillett et al. (2009) found that families with the present of an eating disorder, as compared to families without the present of one, have a greater proportion of closed and rigid family rules.

Furthermore, studies that examined the emotional relationship between children and parents has shown that parental overprotection is related to disordered eating (Argyrides & Lamprianou, 2016; Eisler & Le Grange, 1990; Minuchin et al., 1975; Tata et al., 2001). Interestingly, Argyrides and Lamprianou (2016) examined parental overprotection with Greek-Cypriot participants using the Parental Bonding Instrument (Parker, Tupling, & Brown, 1979). Their results indicated that 100% of the 245 participants reported that their relationship with their mother *and* father was categorized as "overprotective" and the only thing that differed in their data was the level of care one felt from their mother and father. This is a significant finding since it provides information of the emotional dynamics of families in Cyprus.

Cyprus is a Mediterranean island-country that received attention from researchers due to concerning findings on body image-related issues of Greek-Cypriots as compared to other European countries such as England, Greece, Germany, Italy, Spain, France and Switzerland (Argyrides, Kkeli, & Koutsantoni, 2015; Argyrides, Kkeli, & Koutsantoni, 2016). Furthermore, two epidemiological research studies that examined disordered eating in Cyprus suggest that Greek-Cypriot boys and girls have very high levels of disordered eating (Hadjigeorgiou, Tornaritis, Savva, Solea, & Kafatos, 2012), and especially for girls, the percentages (34.4% in 2003 and 35.9% in 2010) are higher as compared to all Western and non-Western countries assessed in the literature (Argyrides, 2015). In a different epidemiological study however that attempted to replicate the previous results, Argyrides (2015) found similar levels of disordered eating behaviors with many countries in the literature

(16,4%). Moreover, Argyrides (2015) and Argyrides et al. (2015) suggested several reasons that appear to make Greek-Cypriots more vulnerable to body image dissatisfaction and disordered eating, such as the 320 days of sunshine that leads inhabitants to wear lighter and more revealing clothes, the great emphasis placed on social and personal image after the 1974 Turkish invasion and the lack of a prevention culture and/or interventions. Furthermore, the Cypriot culture combines traditional as well as westernized attitudes and ideas, thus becomes of interest concerning research examining body image and disordered eating issues. Additionally, Cyprus maintains the characteristics of the traditional family system with strong emotional ties between nuclear and extended family members (Georgas et al., 1997; Georgas et al., 2001). Therefore, if one considers in Cyprus the strong influence of family, as suggested by the literature, with regards to problematic eating patterns, it becomes important to examine the relationship between family dynamics and disordered eating in Greek-Cypriots.

Based on all of the above, the overall aim of the current study was to examine family dynamics and their possible associations to disordered eating patterns in Cyprus. More specifically, the study aimed to examine the perceived quality of the family relationships and assess whether a specific pattern of family functioning is associated with unhealthy eating practices. Moreover, based on previous contradicting percentages of disordered eating in Cyprus using the EAT-26 (Argyrides, 2015, who found 16.4%; Hadjigeorgiou et al., 2012, who found ~ 35%), the study also aimed to assess the number of participants who scored over 20 on the EAT-26. Lastly, and guided by previous research findings, the study aimed to possibly confirm associations and/or differences between dieting (restrained eating), place of upbringing, current relationship status of participants and disordered eating attitudes and behaviors. Based on these aims, the following five hypotheses were developed:

H1: The percentage of disordered eating in Cyprus females as measured by a score of ≥ 20 on the EAT-26 will resemble Argyrides' (2015) epidemiological study who found 16.4% and not Hadjigeorgiou et al.'s (2004 and 2010 as cited in Hadjigeorgiou et al., 2012) studies who found ~35%.

H2: Participants will rate their families as highly cohesive and report high levels of communication and satisfaction.

H3: There will be significant relationships between the types of family dynamics assessed and disordered eating patterns and behaviors.

H4: Rigidity in families will be positively related to disordered eating whereas family cohesion, family communication, and family satisfaction will be negatively related to disordered eating.

H5: There will be a significant positive relationship between number of diets within the last year and all measures of disordered eating.

Method

Participants

A total of 109 Greek-Cypriot females participated in the current study. The age of participants ranged between 18–30 years old (M_{age} = 20.28; SD_{age} = 2.89). The height of participants ranged from 150–180 cm (M_{height} = 164.08; SD_{height} = 6.0) and their weight ranged from 41 to 89 kg (M_{kg} = 55.74; SD_{kg} = 8.32). Based on participants' height and weight, their Body Mass Index (BMI) was calculated and indicated that 28 females

(25.7%) represented the “Underweight” category (BMI = 0-18.5), 75 (68.8%) represented the “Normal Weight” category (BMI = 18.5–24.99), and 6 (5.5%) the combined “Overweight/Obese” category (BMI greater than 25).

Measures

Demographic Information

A demographic questionnaire was administered which asked participants to provide their age, height, weight, place of upbringing and residence, marital status, and number of diets they were on during the past year.

Disordered Eating Attitudes and Behaviors

To assess for disordered feelings, attitudes and behaviors, participants responded to the Eating Attitudes Test-26 (EAT-26; Garner, Olmsted, Bohr, & Garfinkel, 1982; Varsou & Trikkas, 1991 for the Greek version). The EAT-26 is a 26-item self-report instrument that consists of three subscales: Dieting, Bulimia and Food Preoccupation and Oral Control. Each item is rated on a 6-point Likert-type scale which ranges from Always (receiving a score of 1) to Never (receiving a score of 6). The EAT-26 also provides a Total Composite Score. When participants’ Total Composite Score is 20 or higher, it is indicative that one is at a higher risk of developing an eating disorder. The EAT-26 has reported reliability coefficients ranging from .86 to .90. For the current study, the Total Composite Score was used and its reliability coefficient was .88.

Dietary and Eating Restraint

The Revised Restraint Scale (RS; Herman & Polivy, 1980; Kkeli, Michaelides, & Karekla, 2017 for the Greek version) is a self-report instrument that intends to identify restrained eaters among the general population. The scale consists of 10 items, half of which are rated on a 4-point Likert-type scale, and the other half on a 5-point Likert-type scale. The RS contains two subscales: Weight Fluctuation and Concern for Dieting. Weight Fluctuation assesses the history of weight fluctuations and it is measured by four items, whereas Concern for Dieting assesses the attitudes towards dieting and it is measured by six items. High scores on the scale are indicative of greater intention to restrict eating. The reliability coefficients range from .66 to .71 for the Weight Fluctuation subscale, and from .70 to .80 for the Concern for Dieting subscale. For the current sample, the internal consistency coefficient alpha ranged between .80 to .82 on the two subscales.

Family Dynamics

The Flexibility and Cohesion Evaluation Scale—IV (FACES—IV; Gorall, Tiesel, & Olson, 2006; Olson, 1986; Koutra, Triliva, Roumeliotaki, Lionis, & Vgontzas (2012) for the Greek version) was used to assess family dynamics. The FACES—IV is a 42-item questionnaire that measures healthy as well as problematic family functioning using six scales. There are two balanced scales: the Balanced Family Cohesion (assessing emotional bonding of family members) and the Balanced Family Flexibility (assessing flexibility of family power, rules and roles in response to situational stress or developmental changes). These two balanced scales are associated with healthy family functioning. There are also four unbalanced scales: a) Disengaged (assessing families which are too distant), b) Enmeshed (assessing families that are too cohesive), c) Rigid (assessing families that do not handle and accept change), and d) Chaotic (assessing families that change too much and easily). All these four subscales are associated with problematic family functioning. Each of the 42 items is scored on a 5-point Likert-type format, ranging from “Strongly Disagree” (receiving a score of 1) to “Strongly Agree” (receiving a score of 5). The total score for each of the subscales indicates the perceived level of healthy or problematic functioning of the family. Additionally, the FACES—IV package also contains the Family Communication Scale

(FCS) and the Family Satisfaction Scale (FSS). The FCS measures the positive communication skills utilized in the family system and contains 10 items and the FSS measures the degree of happiness and fulfilment family members feel for each other, which also contains 10 items. Each of the 20 additional items is scored again on a 5-point Likert-type scale ranging from "Very Dissatisfied" (receiving a score of 1) to "Extremely Satisfied" (receiving a score of 5). The total score of the FCS indicates the perceived level of overall satisfaction with the family and the total score of the FSS the perceived level of satisfaction with the communication within the family. The Cronbach alpha coefficients for the current sample for the six scales of FACES—IV range from .77 to .89 (Disengaged α = .87, Enmeshed α = .77, Rigid α = .83, Chaotic α = .85, Balanced Cohesion α = .89, Balanced Flexibility α = .80) and the internal consistency coefficient for the FCS is .90 and for the FSS .93.

Procedure

Upon ethics approval, the female participants of the current study were recruited as a convenience sample from two colleges and one university in Cyprus through announcements of voluntary participation in a research study. To attract participation, they were informed of the opportunity to be entered in a lottery to win one of two €50 gift certificates to a local department store. Participants were informed of the nature of the study and were ensured that their participation was anonymous and voluntary. Participants had to complete a demographic data sheet, the EAT-26, the RS, and the FACES—IV. Data were then entered into the SPSS software (version 20.0) where descriptive statistics were conducted on participants' age, height, weight, BMI, place of upbringing, marital status, and the number of diets they were on within the last year. Furthermore, the total scores of the six FACES—IV scales as well as the Family Communication and the Family Satisfaction scales were also calculated. Moreover, the total score of the EAT-26 scale was also calculated. At that point, Pearson-product moment correlational analyses were carried out to examine associations between disordered eating patterns and behaviors, family dynamics and the number of diets one had within the last year. Finally, two independent sample t-tests were conducted to examine possible differences between the independent variables of place of upbringing (urban vs. rural) and relationship status (single vs. committed relationship) on the measures of interest.

Results

In order to address the first hypothesis (H1) referring to the occurrence of significant levels of disordered eating, the percentage of participants who scored equal to, or higher than 20 on the EAT-26 was calculated. The results showed that 16.5% of the participants had a score of 20 or more on the EAT-26, indicating endorsement of significant disordered eating. Therefore, our hypothesis was supported since the 16.5% of the sample who scored 20 or higher on the EAT-26 resembles more the epidemiological study of Argyrides (2015), which found 16.4%.

To address the second hypothesis (H2) referring to how Greek-Cypriot females perceive the quality of their family relationships, the total scores of the six scales of the FACES—IV measure (Balanced Family Cohesion, Balanced Family Flexibility, Disengaged, Enmeshed, Rigid, and Chaotic) and the total scores of the Family Communication and Family Satisfaction scales were calculated. Table 1 shows the total scores of the two balanced scales. As can be seen from the table, the majority of the participants reported that their family was connected and flexible.

Table 1

Total Scores of the Two Balanced Scales of FACES—IV

Variable	Somewhat Connected / Somewhat Flexible	Connected / Flexible	Very Connected / Very Flexible
Balanced Family Cohesion	25.7%	41.3%	33.0%
Balanced Family Flexibility	0.0%	54.1%	45.9%

Table 2 shows the total score of the four unbalanced scales of the FACES—IV. As seen from the table, the perceived scores on each of the scales mostly ranged from "Moderate" to "Very Low", with only a few participants perceiving their family as highly or very highly problematic on any of the four scales.

Table 2

Total Scores of the Four Unbalanced Scales of FACES—IV

Variable	Very Low	Low	Moderate	High	Very High
Disengaged	58.7%	33.0%	7.3%	0.9%	0.0%
Enmeshed	40.4%	47.7%	11.0%	0.0%	0.9%
Rigid	28.4%	45.0%	23.9%	1.8%	0.9%
Chaotic	59.6%	27.5%	11.0%	1.8%	0.0%

Table 3 shows the total score of the participants on the Family Communication Scale and the Family Satisfaction Scale. The results show that the perceived level of communication for most of the participants (64.2%) ranged from "High" to "Very High" whereas the equivalent overall satisfaction (High to Very High) was at 39.4%.

Table 3

Total Scores on the Family Communication Scale (FCS) and the Family Satisfaction Scale (FSS)

Variable	Very Low	Low	Moderate	High	Very High
FCS	5.5%	11.0%	19.3%	39.4%	24.8%
FSS	16.5%	25.7%	18.3%	28.4%	11.0%

Based on the above information, Hypothesis 2 is partially supported. More specifically, the level of family communication was indeed overall high whereas the overall satisfaction was split between the "High" group (~ 40%) and the "Low" group (~ 40%).

To address the third and fourth hypotheses (H3 and H4) referring to the relationship between family dynamics, rigidity, family cohesion, family communication, family satisfaction and disordered eating patterns and behaviors, a Pearson Product Moment correlation matrix was conducted. As can be seen in Table 4, the analysis revealed a statistical significant positive relationship between rigidity in one's family and the Total Composite Score of the EAT-26 and the RS subscale of Concern for Dieting. This implies that the higher the rigidity in one's family, the higher the problematic eating patterns and the concerns towards dieting.

Table 4

Correlations Between Family Dynamics and Disordered Eating Patterns & Behaviors

Measure	Balanced Cohesion	Balanced Flexibility	Disengaged	Enmeshed	Rigid	Chaotic	Family Communication	Family Satisfaction
M1	.096	.785	.593	.297	.017*	-.787	.646	.590
M2	.634	.457	.980	.306	.021*	.966	-.554	.827
M3	-.447	-.638	.170	.575	-.445	.579	-.993	-.954

Note. M1 = EAT-26 Total Composite Score; M2 = RS Concern for Dieting; M3 = RS Weight Fluctuation.
*p < .05. **p < .01. ***p < .001.

To examine the fifth hypothesis (H5) referring to the relationship between the number of diets within the last year and all our measures of food intake and disordered eating, another Pearson Product Moment correlation matrix was conducted. As expected, the analysis revealed a statistically significant moderate to strong positive relationship between the number of diets within the last year and the EAT-26 Total Composite Score (r = .600, p < .001), the RS Weight Fluctuation (r = .530, p < .001) and the RS Concern for Dieting (r = .467, p < .001) scores. This implies that the higher the number of diets participants were on over the last year, the more disturbed eating patterns they had, as well as concerns about weight fluctuation and dieting.

Discussion

The current study had several aims which included: a) to assess the percentage of disordered eating in Cyprus using the EAT-26 b) to examine family dynamics and their possible associations to disordered eating patterns in Cyprus c) to examine the perceived quality of family interactions and d) to examine and assess possible associations and/or differences between dieting, place of upbringing, current relationship status and disordered eating attitudes and behaviors.

The results of the current study support the first hypothesis referring to the percentage of disordered eating in Cyprus when using the EAT-26. Specifically, the results showed that 16.5% of the participants received a Composite Total Score of 20 or higher on the EAT-26. This percentage matches the findings of Argyrides' (2015) epidemiological study (16.4%). Considering the current findings, as well as Katsounari's (2009) findings who used the EAT-40 and 28.5% of her university-age sample scored in the "at-risk" category, the suggestions by Argyrides and Kkeli (2015) who argued that prevention programs in Cyprus should be implemented immediately receives more support. It appears that the lack of prevention programs and interventions addressing healthier eating patterns and behaviors in Cyprus does have an influence on Greek-Cypriot females who seem to be prone towards disturbed eating patterns and behaviors. Regardless of which study one looks at, the percentage includes a significant number of individuals and thus, prevention is necessary.

The second hypothesis of the current study appears to be partially supported as the majority of the participants reported that their families are cohesive and flexible, have very low levels of disengagement, low levels of enmeshment, low levels of rigidity and low levels of chaos. Additionally, most Greek-Cypriot women that participated in the current study reported high levels of communication with their families. However, concerning family satisfaction, participants' responses were split between those reporting high and very high satisfaction (~ 40%) and those reporting low and very low satisfaction (~ 40%). Therefore, even though communication is high, it

appears that other variables contribute to the perceived family satisfaction experienced by Greek-Cypriot women, and this should be examined further in future studies. Overall, the current findings provide a general picture of the perceived quality of the family relationships of Greek-Cypriot females. These findings are important considering that previous research on disordered eating patterns has shown that overall dysfunction of the family, and specifically poor communication, conflict, low cohesiveness, and low emotional expression, is linked to disturbed eating patterns and behaviors (Byely et al., 2000; Haworth-Hoeppner, 2000; Latzer et al., 2002; Wallin et al., 1996; Wisotsky et al., 2003). Based on our findings, it seems like the overall "good" functioning of Greek-Cypriot families reported by participants does not appear to serve as a significant protective factor to Greek-Cypriot women from unhealthy eating practices. In line with the suggestions put forward by Argyrides et al. (2015), we further support the argument of the uniqueness of the culture in Cyprus concerning these issues. As previously mentioned, the combination of the year-round warm weather, the great emphasis placed on social and personal image after the economic boost following the Turkish invasion, and the lack of preventive strategies contribute to the problematic eating patterns and behaviors of Greek-Cypriots, regardless of their satisfaction or dissatisfaction within their family dynamics. Therefore, the current findings contribute significantly to the existing literature by supporting that the "good" functioning of Greek-Cypriot families as reported by participants does not protect Greek-Cypriot women from experiencing disturbed eating patterns and behaviors. This assertion requires further investigation.

The third and fourth hypotheses of the current study are also partially supported since the current findings showed that rigidity in families is significantly and positively related to the scales of disordered eating attitudes and behaviors. This finding is important considering that the overall rigidity score of the sample was low, yet, still significantly related to disordered eating. Thus, for Greek-Cypriot women, rigidity is a risk factor for disordered eating attitudes and behaviors, a finding which is also supported from previous literature that linked authoritarian parenting practices and especially rigidity to eating disturbances (Cuffe et al., 2005; Enten & Golan, 2009; Flett et al., 1995; Gillett et al., 2009; Striegel-Moore et al., 2005; Tata et al., 2001). The attention of researchers and practitioners who work with disordered eating should be directed further towards the construct of rigidity and should be taken into consideration in the development of prevention programs as well.

The current findings do not provide support to the second part of the fourth hypothesis since family cohesion, family communication and family satisfaction were not negatively related to disordered eating patterns and behaviors as predicted. With respect to family cohesion, previous research has shown that high emotional bonding serves as a protective factor towards problematic eating practices. However, although 74.3% of the women that participated in the current study reported feeling "connected" and "very connected" to their families, no such negative relationship with disordered eating was statistically significant. A closer view of the family relationships/dynamics of Greek-Cypriots provides a possible explanation of this unexpected finding. An additional characteristic of Greek-Cypriot families that was not directly investigated in the current research but was found to be related to disordered eating in Cyprus is parental overprotection (Argyrides & Lamprianou, 2016; Eisler & Le Grange, 1990; Minuchin et al., 1975; Tata et al., 2001). As discussed earlier in the introduction, Argyrides & Lamprianou (2016) found that 100% of the Greek-Cypriot participants reported overprotective relationships with their mother *and* father. Therefore, it is possible that the participants of the current research also experience high levels of parental overprotection. Therefore, although the current participants have strong emotional bonding with their family members, they simultaneously experience high levels of overprotection. As a result, the influence of family cohesion as a protective factor to disordered eating is minimized. Further support to this assertion comes from the current findings which showed that a significant proportion of the current participants

(42%) reported “Low” to “Very Low” levels of family satisfaction. Therefore, although highly cohesive, a significant amount of Greek-Cypriot participants felt dissatisfaction with their families. The above assertion requires further investigation in future studies, especially ones that will include more qualitative data.

The fifth hypothesis of the study is also supported as the number of diets participants were on within the last year was significantly related to disordered eating patterns and behaviors. In concordance with multiple previous research (French & Jeffery, 1994; Herman et al., 2005; Hsu, 1997; Lowe, 2002; Polivy & Herman, 1985; Russell, 1979; Schmidt, 2002; Wilson, 2002), the current results suggest that dieting in order to lose weight and the fear of gaining weight contributes to problematic eating patterns and eating disorders. This finding further asserts our recommendation of the immediate need of implementation of preventive strategies.

Application to Counseling Psychology

The results of the current study could be used by professional counseling psychologists who work with Greek-Cypriot women struggling with disturbed eating practices. The current results highlight that certain family functioning dynamics may place some individuals at risk for eating disturbances and therefore, counselors should turn their attention to these family dynamics of their clients. Specifically, the finding that parenting practices and especially rigidity make some individuals more prone towards eating disturbances should be considered by counselors. Counselors could use this information to organize family-based interventions that will help clients and their families in dealing with disturbed eating practices and behaviors. Additionally, results indicate that, an overall good communication in families, should not reassure the counselor of a lack of disordered eating patterns. Moreover, there is a clear need for immediate implementation of preventing strategies in Cyprus. Counseling psychologists who are interested in primary prevention strategies should turn their attention towards disordered eating patterns.

Conclusion

The current study examined family dynamics in Cyprus with respect to the development of disordered eating patterns and behaviors. The unique characteristics of Cyprus as described in the introduction section, together with the traditional family system with the strong emotional ties between nuclear and extended family members makes research on disordered eating habits of great interest in Cyprus. The results of the current study add to the limited existing literature of disordered eating in Cyprus by providing information on how families can influence the development of problematic eating patterns and behaviors. The current results could be used by mental health professionals who work with families and with researchers working on developing prevention programs. As it is well-known, families play a central role in the development of healthy and unhealthy eating practices and therefore, prevention programs should not only target the population who is struggling with disordered eating patterns, but also the general population.

The current study is limited by the fact that some aspects of family dynamics, such as overprotectiveness were not directly examined. A similar study using a measure that assesses such variables (i.e. the Parental Bonding Instrument or Memories from Childhood) would be beneficial for further investigation. In addition, although this study supported that families can influence the development of disordered eating patterns and behaviors among Greek-Cypriot women between ages of 18 to 30, future research should also assess other age groups as well (i.e. younger and older girls/women), as well as boys and men. Additionally, future research should ex-

amine whether other variables not directly examined in the current research can have a significant effect on family satisfaction. For example, one such variable could be overprotectiveness or other parental characteristics (i.e. parental acceptance/rejection) that were not examined in the current study. Future research should also be directed in a more qualitative nature to assess the more complex assertions made in this article. Finally, the current study involved the use of self-report questionnaires, which always raises questions of whether participants were objective in their responses.

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Competing Interests

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