Brief research report

Associations between sociocultural pressures to be thin, body distress, and eating disorder symptomatology among Chilean adolescent girls

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Abstract

This study explored the relationships between perceived sociocultural pressure to fulfill the thin beauty ideal, body distress, and the presence of eating disorder symptoms. Participants were 437 Chilean adolescent girls from Arica, northern Chile, aged 13–18. Results showed significant associations between perceived pressure from social agents to be thin and the presence of disrupted eating attitudes and behavior. The perceived influence of advertising, verbal messages and social situations related to eating and dieting emerged as the strongest predictors of eating disorders symptoms. Influence of advertising was also the strongest predictor of body image distress. Age differences emerged in perceived sociocultural pressure to be thin, with older participants reporting higher sociocultural pressure to fulfill the slender beauty ideal. This paper provides information about body distress and associated disturbances, a phenomenon which has seldom been studied in non-Western countries, but which has important health implications.

Introduction

During recent decades, a thin body shape has been imposed as a standard image of success and beauty in both developed and developing societies. The impossibility for most women to attain this slender ideal has often been associated with body dissatisfaction in adolescents and young adult women (Levine & Smolak, 2004; Stice & Whitenton, 2002), as well as with behavior such as dieting, fasting and, ultimately, the development of eating disorder (ED) symptomatology (Striegel-Moore & Cachelin, 2001; Thompson & Stice, 2001).

For many adolescents, the physical changes that occur during this developmental period may be associated with doubts about their body, an exaggerated sensitivity to the opinions of others, and insecurity about personal interests and desires (García, 2003). Indeed, several studies have shown an association between sociocultural factors and ED symptomatology (Halliwell & Harvey, 2006; Muris, Meesters, van de Blom, & Mayer, 2005; Toro, Salamero, & Martínez, 1994). The slender body ideal and associated body dissatisfaction have usually been ascribed to Western societies or developed countries. However, such a beauty ideal and body concerns are now spreading to different social, economic and cultural settings as part of the globalization of Western beliefs, attitudes and practices. Consequently, body dissatisfaction and weight concerns are now present in most societies, including those in Latin America. Body image research on Latin American women has been scarce, and the results obtained when comparing body distress in Latin and Caucasian participants are often inconclusive or they even offer contrary findings (Acosta & Gómez-Peresmitre, 2003; Raich, Mora, Sánchez-Carracedo, Torras, Viladrich, & Zapater, 2001; Rodríguez & Cruz, 2008). Studies of the Chilean population are even rarer. McArthur, Holbert, and Pena (2005) studied attitudinal and perceptual dimensions of body image among adolescent boys and girls from six Latin American cities, including Santiago (Chile). They found that 68% of girls and 57% of boys were dissatisfied with their body, and 55% of girls and 31% of boys wanted to be thinner. Recently, Swami, Frederick, Aavik, Alcalay, Allik, and Anderson (2010) assessed the attitudes of 7434 individuals from 10 major world regions concerning body weight ideals and body dissatisfaction. They found differences in body dissatisfaction among the women from the 10 regions. In general, women in the Americas (including Canada,
USA and Chile—Santiago) experience greater body dissatisfaction than women in other regions. Mellor, McCabe, Ricciardelli, and Merino (2008) provided more specific data about the role of sociocultural factors in body dissatisfaction and body change behavior in Chile. They found that the only significant unique predictor of body dissatisfaction and weight loss behavior for both boys and girls was perceived pressure from family to lose weight. Mellor and colleagues argued that family seems to play a much more important role among Chilean adolescents than other sociocultural factors, such as media and peer pressure, and hypothesized that an authoritarian and cohesive family structure in Chilean society could explain their findings.

Given that both internalization of the thin beauty ideal and perceived pressure to be thin are linked with body dissatisfaction and ED symptoms (Unikel, Aguilar, & Gómez-Peremistré, 2005), the present study aimed to explore the relationships between perceived sociocultural pressure to be thin and both the presence of body distress and ED symptoms in a sample of Chilean girls. Adolescence marks a time of rapid and intense physical, psychological, and behavioral changes (García, 2003). Hence, the study also explored age trends in sociocultural pressure for thinness and body distress. We recruited a sample of adolescent girls from Arica, located in the northern region of Chile on the border with Peru and Bolivia. Arica is a town with 175,000 inhabitants with an economy based on fishing and agriculture. Historically, it has had a relatively strong redoubt of indigenous cultures, and the roots of its inhabitants are from several indigenous and African groups. Approximately 48,500 persons in Arica belong to the Aymara ethnic group, which is characterized by a closed social system composed by farmers, fishermen and shepherds, and is traditionally nomadic. Due to their proximity, Arica also has an important affinity with the cultures of Peru and Bolivia. Chile has undergone profound changes since the end of military dictatorship. The consequent processes of democratization and integration into the global economy during the last two decades have generated an increased influence from the western cultural practices and values.

Method

Participants

The participants in the study were 437 adolescent girls aged 13–18 years old ($M = 15.48$, $SD = 1.39$). They had been attending school for 8–12 years and were at either private schools ($n = 157$), state-sponsored private schools ($n = 71$) or schools run by the District Educational Service ($n = 209$), all in urban areas of Arica. At private schools, the family assumes all the costs of education. At state-sponsored private schools, the family assumes only part of the total costs, while the government pays the rest. Finally, the schools run by the District Educational Service are free.

Measures

Sociocultural pressure to be thin. The Questionnaire on the Influence of the Aesthetic Body Shape Model (Cuestionario de Influencia del Modelo Estético Corporal, CIMEC-40; Toro et al., 1994) was used to assess perceived pressure from social agents to achieve the slimmer beauty ideal and body distress. The CIMEC is comprised of 40 items that are rated along a 3-point scale (where always is 3, sometimes is 2, and never is 0), and items are summed for a total score and subscale scores. Scores range from 0 to 80 and the cut-off point is set at 23–24 (Toro et al., 1994). The questionnaire has a very high internal consistency (Cronbach’s alpha = .93; Toro et al., 1994), and allows an alternative analysis to be conducted using only 26 items grouped into five factors: (1) distress due to body image (anxiety and discomfort with body image: eight items; e.g., are you distressed when it is summer because you will have to wear lighter clothing or a swimsuit?); (2) influence of advertising (interest in advertising for slimming products; eight items; e.g., do adverts for slimming products in magazines attract your attention?); (3) influence of verbal messages (interest in magazine articles, books, stories and conversations about slimming; three items; e.g., are you interested by conversations and comments on weight, calories, figure, etc.?); (4) influence of social models (interest in body shape and body dimensions of actresses, models or ordinary people; four items; e.g., when you are walking down the street, do you pay special attention to whether the people you see are fat or thin?); (5) influence of social situations (concerns about food in social situations and social acceptance attributed to thinness; three items; e.g., when you eat with other people, do you focus on the amount of food they eat?). CIMEC-40 and CIMEC-26 showed adequate psychometric properties for the total score and Factors 1–3 with a sample of 59 anorectics and 59 normal adolescent girls (Toro et al., 1994). In the current study Cronbach’s alpha was .95 for the CIMEC-40, .88 for the factor body distress, .91 for the factor influence of advertising, .81 for the factor influence of verbal messages, .62 for the factor influence of social models, and .81 for the factor influence of social situations.

ED attitudes and behavior. The Eating Attitudes Test-26 (EAT-26; Garner, Olmsted, Bohr, & Garfinkel, 1982) is a self-administered questionnaire that detects ED symptoms in non-clinical samples. The EAT-26 contains 26 items that are rated along a 6-point scale (always, usually, and often are scored 3, 2, and 1, respectively and sometimes, rarely, and never are each scored as 0), and items are summed for a final score. The questionnaire provides information about fear of weight gain, drive for thinness and weight restricting activities, and it is recommended for use as a screening instrument with a cut-off point of 20 (Gonzalo, 1995). In this study, the Spanish translation by Bulbena and colleagues was used (Bulbena, Berrios, & Fernández de Larrinoa, 2000). Items on the EAT-26 are internally consistent with a sample of 160 females with anorexia nervosa and 140 control females (Cronbach’s alpha = .90; Garner et al., 1982). In the current study Cronbach’s alpha was .85.

Procedure

Once approval was obtained from the University of Tarapacá’s authorities, the surveys were administered in classrooms during the usual school hours of each institution. Participants were volunteers and received no compensation for filling out the measures. Prior authorization was obtained from school authorities, and all the participants gave their consent once they were reassured that their responses would remain anonymous. It should be noted that participants with missing data were only excluded from those statistical analyses that required these specific data.

Results

Participants reported elevated scores both in CIMEC-40 and in its five scales considered separately (Table 1), with all the means over the cut-off points established by Toro and colleagues in Spanish sample (Toro et al., 1994). However, the EAT-26 mean score was under the cut-off point established in the Spanish population (Gonzalo, 1995).

A positive and significant correlation between age and sociocultural pressures to be thin/body distress was found ($r = .16$, $p < .001$).
This result suggests that participants perceive more pressure from social agents to achieve the slender beauty ideal as their age increases (Table 2). The highest levels of perceived sociocultural pressure were reported at 16 and 18 years old. No relation between age and ED symptomatology was found.

Table 1
Summary of intercorrelations, means (M) and standard deviations (SD) for scores on EAT-26, CIMEC-40, and CIMEC factors.

<table>
<thead>
<tr>
<th>Measure</th>
<th>EAT-26</th>
<th>CIMEC-40</th>
<th>Factor I</th>
<th>Factor II</th>
<th>Factor III</th>
<th>Factor IV</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>EAT-26</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>12.19</td>
<td>10.86</td>
</tr>
<tr>
<td>CIMEC-40</td>
<td>.65</td>
<td>.90</td>
<td>.72</td>
<td>.62</td>
<td>.58</td>
<td>.62</td>
<td>36.37</td>
<td>24.11</td>
</tr>
<tr>
<td>Factor I. Body distress</td>
<td>.56</td>
<td>.90</td>
<td>.72</td>
<td>.62</td>
<td>.58</td>
<td>.62</td>
<td>9.72</td>
<td>7.33</td>
</tr>
<tr>
<td>Factor II. Influence of advertising</td>
<td>.62</td>
<td>.84</td>
<td>.72</td>
<td>.62</td>
<td>.58</td>
<td>.62</td>
<td>3.42</td>
<td>4.07</td>
</tr>
<tr>
<td>Factor III. Influence of verbal messages</td>
<td>.55</td>
<td>.76</td>
<td>.62</td>
<td>.50</td>
<td>.58</td>
<td>.58</td>
<td>3.15</td>
<td>2.85</td>
</tr>
<tr>
<td>Factor IV. Influence of social models</td>
<td>.49</td>
<td>.80</td>
<td>.68</td>
<td>.50</td>
<td>.58</td>
<td>.58</td>
<td>4.02</td>
<td>2.87</td>
</tr>
<tr>
<td>Factor V. Influence of social situations</td>
<td>.51</td>
<td>.75</td>
<td>.64</td>
<td>.61</td>
<td>.51</td>
<td>.62</td>
<td>2.90</td>
<td>2.34</td>
</tr>
</tbody>
</table>

* p < .01.

Table 2
Means (M) and standard deviations (SD) for scores on EAT-26, CIMEC-40, and CIMEC factors depending on age.

<table>
<thead>
<tr>
<th>Measure</th>
<th>Age</th>
<th>M</th>
<th>SD</th>
<th>M</th>
<th>SD</th>
<th>M</th>
<th>SD</th>
<th>M</th>
<th>SD</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>EAT-26</td>
<td>13 (n=35)</td>
<td>8.89</td>
<td>9.04</td>
<td>11.30</td>
<td>10.64</td>
<td>12.36</td>
<td>9.34</td>
<td>14.25</td>
<td>11.85</td>
<td>10.98</td>
<td>11.23</td>
</tr>
<tr>
<td>CIMEC-40</td>
<td>14 (n=91)</td>
<td>25.17</td>
<td>19.09</td>
<td>33.25</td>
<td>22.13</td>
<td>33.83</td>
<td>22.01</td>
<td>42.75</td>
<td>26.72</td>
<td>36.15</td>
<td>22.91</td>
</tr>
<tr>
<td>Factor II. Influence of advertising</td>
<td>1.97</td>
<td>3.12</td>
<td>2.93</td>
<td>3.82</td>
<td>2.98</td>
<td>3.50</td>
<td>4.08</td>
<td>4.37</td>
<td>3.70</td>
<td>4.49</td>
<td>4.81</td>
</tr>
<tr>
<td>Factor III. Influence of verbal messages</td>
<td>2.11</td>
<td>2.43</td>
<td>2.74</td>
<td>2.49</td>
<td>3.08</td>
<td>2.70</td>
<td>3.77</td>
<td>2.95</td>
<td>3.13</td>
<td>3.10</td>
<td>3.77</td>
</tr>
<tr>
<td>Factor IV. Influence of social models</td>
<td>2.66</td>
<td>2.07</td>
<td>3.69</td>
<td>2.65</td>
<td>3.86</td>
<td>2.68</td>
<td>4.67</td>
<td>3.17</td>
<td>4.14</td>
<td>2.88</td>
<td>4.42</td>
</tr>
<tr>
<td>Factor V. Influence of social situations</td>
<td>2.23</td>
<td>1.88</td>
<td>2.70</td>
<td>2.38</td>
<td>2.93</td>
<td>2.23</td>
<td>3.31</td>
<td>2.60</td>
<td>2.65</td>
<td>2.06</td>
<td>3.62</td>
</tr>
</tbody>
</table>

This result suggests that participants perceive more pressure from social agents to achieve the slender beauty ideal as their age increases (Table 2). The highest levels of perceived sociocultural pressure were reported at 16 and 18 years old. No relation between age and ED symptomatology was found.

Given the strong relation between ED symptomatology and sociocultural pressures to be thin/body distress (r = .65, p < .001), stepwise multiple regression analysis was conducted to determine the unique contributions of specific sources of sociocultural pressure to be thin to ED symptomatology. Body distress was omitted from the analysis because it does not refer to a specific source of sociocultural pressure. The final model accounted for 44.9% of variance, with influence of advertising (β = .39, t[436] = 7.64, p < .001), influence of advertising (β = .36, t[436] = 8.58, p < .001), and influence of social situations (β = .36, t[436] = 8.58, p < .001) made the strongest unique contribution to explaining ED symptoms. Another stepwise multiple regression analysis was conducted to determine the contributions of perceived sociocultural pressure for thinness (factors influence of advertising, influence of verbal messages, influence of social models, and influence of social situations) to body distress (Factor I of CIMEC). The final model accounted for 64.7% of variance and all factors were significant predictors. Influence of advertising (β = .36, t[436] = 8.58, p < .001) made the strongest unique contribution to explaining body distress, followed by influence of social models (β = .26, t[436] = 6.35, p < .001), influence of social situations (β = .17, t[436] = 4.40, p < .001), and influence of verbal messages (β = .16, t[436] = 4.21, p < .001). No multicollinearity violations were found.

**Discussion**

The aim of this study was to identify which particular social pressures to be thin uniquely predict both body distress and ED symptomatology in Chilean adolescent girls from Arica. As expected, the results showed strong and significant associations between perceived pressure of social agents to achieve the slender beauty ideal and the presence of body distress and ED attitudes and behaviors. Previous studies conducted in western societies showed similar results. Lokken, Worthy, and Trautmann (2004), for example, found that both body dissatisfaction and the influence of the thin beauty ideal transmitted by social agents were related to ED symptomatology in a sample of college women. It should be noted that the participants in the present research had very high CIMEC scores; this suggests that Chilean adolescent girls perceive pressure to be thin from various sociocultural agents. Vázquez, Álvarez, and Mancilla (2000) also found CIMEC-40 values over the cut-off point established by the authors (Toro et al., 1994) in a Mexican sample (M = 27.95, SD = 15.83); however, scores found in the present study were even higher, (t[436] = 6.68; p < .001). These results may be influenced by ethnicity as the CIMEC was validated in a Spanish sample of adolescent girls and the established cut-offs are not adapted to the Latin American population. Rodríguez and Cruz (2008) found that Latin American girls living in Spain perceived significantly higher levels of body distress and social pressure to be thin compared to Spanish girls.

Influence of advertising, influence of verbal messages, and influence of social situations emerged as the CIMEC factors that predicted the presence of ED symptoms, with advertising of slimming products in the mass media as the strongest predictor. These results are consistent with previous studies that emphasized the connection between advertising and other media and ED symptoms (Becker & Hamburg, 1996; Martínez-González, Gual, & Lahortiga, 2003). However, other studies conducted using Latin American, and specifically Chilean populations, point to other social agents as major contributors to ED symptomatology. Mellor et al. (2008) found that pressure from family to lose weight was the main predictor of the presence of body dissatisfaction and weight loss in a sample of Chilean adolescent girls and boys. They suggested that family pressure may be more important than other social agents, such as media and peer pressure, for Chilean adolescents. With regard to this, it is important to note that the CIMEC does not include a specific factor related to family pressure, so the role of the family may be undervalued. Even so, the influence of social situations from the CIMEC scale (the third strongest predictor in the model) includes items related to family and peers, which emphasizes the role of close relatives in adolescents’ thin beauty ideal internalization. On the other hand, the Chilean sample in Mellor et al.’s study and the present study come from different geographical areas, which could influence the results. Influence of advertising...
was also the factor that best predicted body distress in this sample, although all assessed social agents exerted significant and unique contributions. Previous studies have provided evidence of the strong relationship between perceived social pressure to be thin and body dissatisfaction (Cafri, Yamamiya, Brannick, & Thompson, 2005).

Age trends in perceived sociocultural pressure and ED symptoms were assessed. Perceived sociocultural pressure to be thin on Chilean girls seems to increase with age. These results do not agree with Rodríguez and Cruz (2008) who found no significant relation between age and CIMEC, although they reported a slight increase in CIMEC scores from 13 to 15 years at which age scores stabilized. Adolescence is a stage of human development that requires the acceptance of important physical changes and the need to seek beauty ideal models that are socially accepted. This makes young adolescents particularly susceptible to social pressure to achieve the thin beauty ideal, a susceptibility that seems to increase during the first years of this period.

This study has several limitations that should be taken into account. First, no information about weight and height of participants was available, so no data about body mass index (BMI) was included. Future research should consider this variable. Secondly, only girls were included in the sample. Since previous studies have found differences on sociocultural perceived pressure to achieve the ideal beauty model depending on gender (Mellor et al., 2008), men should be also considered. Thirdly, CIMEC confounds sociocultural pressures and the internalization of these pressures, two variables that are conceptualized as distinct constructs. Finally, the sample was recruited from Arica, a city in northern Chile with specific social, cultural and demographic characteristics, so results should be generalized to other Chilean regions with caution.

Despite its limitations, the present study provides information about the phenomenon of sociocultural pressure to fulfill the slender beauty ideal that has often been neglected within research in non-Western countries, but which constitutes a major health concern because of its relation to body image disturbances and ED. Future research should focus on longitudinal studies and more heterogeneous samples to further explore the links between the thin beauty ideal, body distress, and ED symptoms in Chile.

References


