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Body image and adolescence: A behavioral impairment model

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ABSTRACT

Adolescence is a period marked by important physical and social changes that can lead to a negative body image. The purpose of this study was to find a model enabling the appearance of behavioral impairment related to body image (restrictions, avoidance, and checking) to be predicted by body image attitudes (concern or Appearance Orientation, and dissatisfaction or Appearance Evaluation), Gender, emotional symptomatology, self-consciousness, ideas of reference (IR) and age. A total of 661 participants (67.47% girls) with an average age of 17.14 years (*SD*=2.34) filled in the GHQ-28, SCS on self-consciousness, REF referential thinking scale, MBSRQ (AO and AE), and BIAQ. A partial mediation model was found for IR, age and depressive symptomatology between dissatisfaction and concern about body image and Gender, to behavioral impairment related to body image. The results found suggest that age, depressive symptomatology, and IR may be mediator variables in the relationship between dissatisfaction and concern about body image, on body image behavioral impairment. This relationship implies a severity to be considered in intervention and monitoring of body image behavioral impairments in adolescents.

1. Introduction

Body image is a stable multifaceted mental representation of our body and its emotional experience, which is continually being updated (Cash and Smolak, 2011; Pruzinsky, 2004; Rodríguez-Testal, 2013). During adolescence, concern about body image is frequent due to the succession of physical and cognitive changes taking place, so evaluation and focus on body and appearance increase (Littleton and Ollendick, 2003; Mitchell et al., 2012). Internalization of the ideal of beauty by sociocultural influences and social comparison facilitate development of a negative body image and unhappiness with appearance (Carey et al., 2014; Vartanian and Dey, 2013).

Body dissatisfaction begins to be relevant from 12 to 15 years of age (Levine and Smolak, 2002) and is a risk factor for eating disorders (Stice et al., 2011) and other maladapted behaviors (Delinsky and Wilson, 2006; Smolak, 2011), amplified by the frequent presence of depressive and anxiety symptoms (Hughes and Gullone, 2011; Markey, 2010). It is known that girls are more dissatisfied with their body image than boys throughout adolescence (Dion et al., 2015).

Cash and Smolak (2011) consider body image to be made up of two attitudes or dimensions. The first is self-evaluation (or appearance evaluation) in which the emotional component prevails, concentrating on pleasure/displeasure or satisfaction/dissatisfaction with appearance (body self-esteem). The effect of internalization of society's ideal of beauty shares in this attitude. A second component of body image is an attitude investment in personal appearance (or appearance orientation). In this cognitive-behavioral dimension, care, attention and behavior related to the body are analyzed (functional component). Reference is made to a negative body image when both attitudes are present, causing dissatisfaction (more usual) and concern/overvaluing appearance, antechamber of body image impairment (Cash and Smolak, 2011; Rodríguez-Testal, 2013).

Body image is a part of our identity and development of our self-consciousness (Adams et al., 1987). It is created based on interaction with others and interiorized social valuation (Cash and Fleming, 2002; Tantleff-Dunn and Lindner, 2011). Adolescents are more prone to compare themselves with others and give much more importance to what others think about their appearance or how they look (Sebastian et al., 2008), favoring a strong tendency to self-focus (acute self-consciousness) and self-referencing, which Elkind and Bowen (1979)

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called “public or imaginary audience” (the characteristic adolescent egocentrism).

Strong self-focused attention, or pathological self-consciousness, is a process related to different impairments, from anxiety and depression to schizophrenia or psychopathy (Ingram, 1990). Fenigstein et al. (1975) differentiated between private self-consciousness and public self-consciousness. The first refers to attention to thoughts, emotions or beliefs, while the second is directed at one's look, physical appearance, impression on others, or a general consciousness of the self as a social object.

Ideas of reference (IR) or self-references are products of cognitive processing by which the subject self-attributes what happens in the social setting (usually negative connotation) (APA, 2013). IR are considered present at any time in the individual's development, can show a loss of adjustment to reality (“they put songs on the radio for me”) and in relation to social interaction (“they look at me and laugh”). They have been described mainly in the area of psychopathology, especially if they are frequent and invasive, or when they are maintained with delusional conviction. They are considered typical symptoms of psychotic disorders in general, as well as paranoid personality or schizotypy disorders, or in social phobia (Lenzenweger et al., 1997; Raine, 1991). Therefore, IR are suggestive of a pathological situation because of their presence and because of one's evaluation of them, as suggested in various instruments (Brenner et al., 2007; Wong et al., 2012), and to differentiate pathologies (Senín-Calderón et al., 2014).

In brief, at this moment of change in adolescence, there are self-directed and self-relevant process related to body image, especially if it is problematic, which would make its transfer into an salient presence in public self-consciousness and IR expectable. Public self-consciousness could be a more general pathological condition or process, and IR, a more specific pathological process (and product) related to social cognition (Senín-Calderón et al., 2014) which places the psychological balance of the adolescent at risk.

The purpose of this study was to examine the relationships of dissatisfaction or Appearance Evaluation (AE), concern or Appearance Orientation (AO) and Gender, with the behavioral impairments related to body image (restrictions, avoidance, and checking). It attempted to check the mediating role of IR, of private self-consciousness, public self-consciousness and emotional symptomatology (anxiety and depression). We therefore proposed the following hypotheses:

1. A higher score in AO and low score on AE is related to a greater presence of IR, more emotional symptomatology (anxiety and depression) and more private and public self-consciousness. Girls score higher on private self-consciousness, and anxiety and depressive symptomatology.
2. IR, private self-consciousness, public self-consciousness, and emotional symptomatology (anxiety and depression) are positively related to body image behavior impairment.
3. The relationship between AO, AE and Gender to body image behavioral impairment is mediated by IR, private self-consciousness, public self-consciousness, and emotional symptomatology (anxiety and depression).

2. Methods

2.1. Participants and procedure

The sample was composed of 661 young people (high school and college students); 215 men (32.53%) and 446 women (67.47%) who gave their written consent for participating in the study (or parents of minors). Their mean age was 17.14 years (*SD*=2.34), age range 14–21. 99.8% of the participants were single. The social class index (according to Hollingshead, 1975) was from 11 (very high class) to 81 (very low class), with a mean total of 39.76 points (middle class; *SD*=20.97).

Participants were selected by non-random accessibility sampling. The participants filled in the self-report assessment tests in class in the order described under instruments.

2.2. Instruments

First self-reported evaluation (by authors). This identified the social class index (SCI) (Hollingshead, 1975), current illnesses, psychopathological antecedents, history and duration of symptoms, psychopharmacological treatments and use of other drugs.

Goldberg General Health Questionnaire (GHQ-28) Spanish version by Lobo et al. (1986). This is a screening test that gives an overall evaluation of health and social dysfunction. It consists of 28 items grouped in four subscales on somatic symptoms, anxiety, social dysfunction and severe depression. In this study, the anxiety and depression subscales were used. It has adequate reliability (test-retest, 0.90) and validity (sensitivity from 44–100% and specificity from 74–93%). In this study, consistency for anxiety symptoms was α=0.80 and depressive symptoms was α=0.70.

Referential Thinking Scale (REF) (Lenzenweger et al., 1997). This 34-item true-or-false self-report questionnaire on ideas of reference (IR) has an internal consistency of 0.83–0.85, retest reliability of 0.86 (four-week interval), and adequate validity indicators. The scale provides a schizotypy indicator with saturation from 0.75 to 0.85 in principal component analysis, and to a lesser extent, for anxiety and depression (0.33 to 0.17). The Spanish version of the REF scale has an α of up to 0.90 (0.83 and 0.82 on each half) and a retest α of 0.76 (average interval of 44 days in patients). The validity criterion (with regard to the clinical follow-up instrument BPRS) has a cutoff point of 7 with 66% specificity and 58% sensitivity (Senín-Calderón et al., 2010). In this study consistency was α=0.82.

The *Revised Self-consciousness Scale* (Scheier and Carver, 1985), Spanish version by Banos et al. (1990) is made up of 22 items which evaluate the tendency of individuals to direct their attention outside or within themselves. It has three factors: 1) Private self-consciousness, 2) Public self-consciousness, and 3) social anxiety, which was not used in this study. It has adequate reliability (α Private self-consciousness=0.75, α Public self-consciousness=0.92, social anxiety =0.81), and validity (content and construct) indicators. In this study consistency was α=0.75 for Private self-consciousness, and α=0.77 for Public self-consciousness.

The *Body Image Avoidance Questionnaire* (BIAQ; Rosen et al., 1991) consists of 19 items that assess avoidance behavior with respect to clothing, social activities, eating restraint, and grooming and weight. The authors of the instrument found high internal consistency (Cronbach's α=0.89), reliability test-retest=0.87, adequate validity (correlation between BIAQ and BSQ=0.71). In our study, the total score was used as the measure of behavioral impairment related to body image. Internal consistency was α=0.73 for the whole scale.

The Multidimensional Body-Self Relations Questionnaire (MBSRQ, Cash, 2000), version by Raich et al. (1996), is a measure of the various aspects of body image. The version used for the study has six factors: [1] Interest in sports and physical aptitude, [2] concern or Appearance orientation, AO, [3] dissatisfaction or Appearance evaluation, AE, [4] Hypochondriac signs [5] Health assessment, and [6] Interest in health. Internal consistency was 0.96, test-retest reliability and validity were adequate. This study used the AE and AO factors. Higher values on the AE subscale suggest satisfaction with one's own appearance. On the AO subscale, higher ratings indicate greater investment in own appearance and body care. The Cronbach's α for this study was 0.90 for AE and 0.87 for AO.

2.3. Data analysis

Descriptive analyses and comparison of means (*t-test*) were done. The variables analyzed (referring to the factors in the evaluation tests) were transformed into Z. Pearson's correlations of the scale factors