Effect of the Parent–Adolescent Relationship on Adolescent Boys’ Body Image and Subjective Well-Being

Ofra Walter, PhD1 and Vered Shenaar-Golan, PhD1

Abstract
Adolescent boys must cope with physical changes that hamper their ability to form a positive body image. Sociocultural messages influence the concepts of body image, personal appearance, and weight, encouraging men to develop lean and muscular bodies. The current study examined adolescent boys’ body image and its relationship to their subjective well-being (SWB) and the effect of the parent–adolescent relationship on body image and SWB. Participating in the research were 107 adolescent boys in Israel, aged 13 to 18 years. Four questionnaires were utilized: demographic, body mass index, Body Investment Scale, and Personal Well-Being Index. The findings indicate a significant, medium positive correlation between SWB and body image. After controlling for the variable of parent–adolescent relationship, the correlation weakened, indicating that the parent–adolescent relationship has no effect on adolescent boys’ SWB and body image. Body image was reported to be a predictor of SWB.

Keywords
adolescent boys, body image, subjective well-being, parent–adolescent relationship

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We live in a society that promotes certain standards of beauty, posing challenges to adolescents from an early age. These standards affect social status and emotional state (Te’omim, 2006). Contemporary Western society values pursuit of a physically attractive body (Slater, Tiggesmann, Hawkins, & Werchon, 2012; Verstuyf, Van Petegem, Vansteenkiste, Soenens, & Boone, 2014). Deviation from modern society’s accepted beauty ideal can lead to a negative body image and a decline in self-worth and general well-being (van den Berg, Keery, Eisenberg, & Neumark-Sztainer, 2010). This affects a central developmental task during adolescence: the construction of a solid and stable identity (Erikson, 1968; Jones & Crawford, 2005). At a time when adolescents are preoccupied with their body image, weight, and personal appearance, they must cope with physical changes that hamper their ability to form a positive body image. Sociocultural messages disseminated through television, magazines, and social media influence these concepts of body image, weight, and personal appearance, encouraging women to be extremely thin and men to develop a lean and muscular body (Silva, 2006; Slater et al., 2012). The central message spread by consumer culture is that attainment of the perfect body is key to a successful and happy life (Verstuyf et al., 2014).

Although much has been written about body image and adolescent girls, fewer studies have focused on adolescent boys and factors that moderate the relationship between body image and psychological functioning, such as the nature of the parent–adolescent relationship and its effect on adolescent boys’ well-being (Carter, Smith, Bostick, & Grant, 2014; Crespo, Kielpikowski, Jose, & Pryor, 2010; Mancini, 2008). The majority of research has concentrated on the role of family and peer relationships and psychological well-being as they relate to body dissatisfaction (Bearman, Martinez, Stice, & Presnell, 2006; Helfert & Warschburger, 2011; Michael et al., 2014). The goal of the current study was to expand this narrow body of knowledge by examining both the construct of body image, which contains a behavioral (body

1Tel-Hai College, Upper Galilee, Israel

Corresponding Author:
Ofra Walter, Department of Education, Tel-Hai College, D.N. Upper Galilee 1220800, Israel.
Email: ofraw60@gmail.com

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care, body protection, and comfort in touch) and an emotional perceptual component (feeling and attitude), among adolescent boys and its relationship to their subjective well-being (SWB) and the extent to which the parent–adolescent relationship moderates the association between body image and SWB. The importance of examining these relationships is magnified given the potential of lasting impact of negative body image during adulthood (Cash & Smolak, 2011).

Adolescent Boys’ Body Image

Body image is defined as the subjective picture of the shape and size of one’s body and the emotions that one relates to one’s body parts and the body as a whole (Cash & Smolak, 2011; Kurtz, 2010; Tamir, 2011). Body image is formed by cognitive evaluation and comparison with others, often done subconsciously, involving neurological, emotional, and social elements (Cash & Smolak, 2011; Thompson & Stice, 2001) and influenced by sociocultural norms (Te’omim, 2006).

Normally, one’s body image is formed over a gradual and lengthy process beginning at birth, shaped by the body’s contact with its environment and the attitudes of parents and significant adults and then peers. Bodily changes in adolescents include changes in build, outward appearance, height, weight, and posture (Erikson, 1950; Greenberg & Ben Bessat, 2009). These changes can greatly influence social standing, self-confidence, and family relationships (Cong, Rebecca, & May, 2013). Coping with constant social pressure to attain the perfect figure or be thin makes forming a positive body image one of adolescent boys’ and girls’ great challenges (Coccia, Darling, Rehm, Cui, & Sathe, 2012).

For over a decade, body mass index (BMI) has been used widely to predict the effect of body weight on body image. For example, previous studies have demonstrated that body size as indicated by BMI is positively related to body dissatisfaction among young adolescents (Jones, Vigfusdottir, & Lee, 2004; Lewinsohn, Seeley, Moerk, & Striegel-Moore, 2002; Paxton et al., 1991; Ricciardelli, McCabe, Lillis, & Thomas, 2006). Based on a specific calculation of height–weight proportion, a BMI of 18.5 to 24.9 is considered normal and optimal (National Heart Foundation in association with the Faculty of Public Health and Department of Health, 2007). Studies have clearly indicated that men are also concerned about body image, particularly in connection with their weight, build, physical appearance, and BMI (Burlew & Shurts, 2013; Jones & Crawford, 2005; Paxton, Eisenberg, & Neumark-Sztainer, 2006). Studies demonstrate that BMI also affects the perceptions of physical appearance and body size (Holsen, Jones, & Birkeland, 2012; Wallander et al., 2009). The percentage of men dissatisfied with their bodies has tripled in the past three decades, reaching 50% according to recent studies (Engeln, Sladek, & Waldron, 2013; Frederick et al., 2007).

Adolescent boys have also shown dissatisfaction with their weight, generally expressed by a desire to be thinner and sometimes expressed by an attempt to gain weight, where it is assumed that weight gain means adding muscle mass (Delfabbro, Winfield, Anderson, Hammarström, & Winfield, 2011). Other studies have reported that adolescent boys were more interested in the shape of their bodies than in their weight (Grogan, 2008; Silva, 2006). In addition, they indicated that adolescents who play sports wanted to match the body type of athletes of their sport (Galli, Reel, Petrie, Greenleaf, & Carter, 2011). A study by Grogan and Richards (2002) of males aged 8 to 25 years indicated a dissatisfaction with their bodies with regard to muscle mass and body functioning. In a more recent study, adolescent boys primarily emphasized the positive aspects of their bodies, potentially leading to the incorrect conclusion that adolescent boys have no problem with their body image (Cash & Smolak, 2011). Indeed, body image has emerged as a significant factor affecting health and well-being during this developmental phase, as youth begin to focus more on their physical appearance (e.g., Bearman et al., 2006; Delfabbro et al., 2011). How adolescents formulate and define their body image ideals and subsequent self-comparisons is strongly influenced by personal factors, cultural factors, physical changes, and the parent–adolescent relationship (Bearman et al., 2006; Flum, 1995).

Parent–Adolescent Son Relationship

The parent–adolescent relationship plays an extremely important role in creating an adolescent boy’s perception of himself and his body (Blodgett Salafia, Gondoli, Corning, McEnery, & Grundy, 2007; Marceau, Ram, & Susman, 2015). Relationships with parents can be seen as micro-social contexts in which significant others provide self-relevant feedback that supports young persons’ psychosocial development, especially in transitions from childhood to adolescence and from adolescence to young adulthood (Koepke & Denissen, 2012; Schacht & Ventura, 2008). Moreover, adolescence is a developmental transition that affects significant change not only in the adolescent but also in the parents, family dynamic, and relationship quality (Marceau et al., 2015; Steinberg et al., 2006). Studies indicate that warmth or closeness decreases from middle childhood to early adolescence and that in early adolescence, conflict increases (e.g., 7-14 years; Fleming, Catalano, Haggerty, & Abbott, 2010; McGue, Elkins, Walden, & Iacono, 2005; Shanahan, McHale, Crouter, & Osgood, 2007). In later adolescence, the parent–child relationship is thought to evolve toward greater autonomy for the adolescent and decreased conflict between the parent and child (Marceau et al., 2015).

This dynamic parent–child relationship has a significant impact on the child’s body image (Boutelle, Eisenberg,
Gregory, & Neumark-Sztainer, 2009; Delfabbro et al., 2011). Research indicates that children and adolescents learn from their families and friends that they should be thin and that being overweight is unappealing (Michael et al., 2014). Research further indicates that parental messages and feedback about body size and shape are significant predictors of body satisfaction (Helfert & Warschburger, 2011; Holsen et al., 2012). Parents who are emotionally warm, available, and who balance these qualities with high expectations create an emotional context in which adolescents tend to be more secure, healthier, and safer than adolescent peers raised in other settings (Michael et al., 2014). Researchers have reported a positive correlation between adolescents’ body satisfaction and parents’ nurturing and supportiveness and, consistently, a positive correlation between young adolescents’ body dissatisfaction and less nurturing and warm parenting (Bearman et al., 2006; Crespo et al., 2010).

Recent studies indicated that adolescents with positive and supportive parents have more consistent body image satisfaction over time (Holsen et al., 2012) and that parents who are critical and unsupportive can have a negative impact on their adolescent boy’s beliefs about themselves (Helfert & Warschburger, 2011; Paxton et al., 2006). These findings are consistent with the earlier research of Bearman et al. (2006) indicating that parental support is a prospective contributor to body image satisfaction for both boys and girls during adolescence.

**Adolescent Subjective Well-Being**

At the center of the study of well-being lies the examination of individuals’ subjective feelings about the quality of their own life—SWB. SWB is defined as “an umbrella term for different valuations that people make regarding their lives, the events happening to them, their body and minds, and circumstances in which they live” (Diener, 2006, pp. 399-400). SWB has a multidimensional structure; it comprises two distinctive components (Diener, 1984): a cognitive component, related to appraisals of life satisfaction, and an affective component, which refers to both the presence of high levels of positive affect and low levels of negative emotional experiences (Andrews & Robinson, 1991; Diener, 2006; Diener, Lucas, & Oishi, 2002). Studies that investigate SWB evaluate the combination of both the cognitive and affective components (Rejeski & Mihalko, 2001). More specifically, in the context of adolescence, SWB plays an important role in positive development and overall adaptation, has important implications for adulthood, and appears to act as a buffer against a variety of negative outcomes (Gilman & Huebner, 2003; Proctor, Linley, & Maltby, 2009; Tomyn & Cummins, 2011). Research has identified that this developmental stage, with its changes and potential stresses and crises, can jeopardize the ability of adolescents to experience high levels of SWB (Keyes, 2006; Orkibi, Ronen, & Assoulin, 2014), or even be characterized by a decline in well-being (Casas, González, Figuer, & Malo, 2009). At the same time, adolescence is considered an opportune stage to establish a strong foundation for positive well-being to lead a satisfying life in adulthood (McCabe, Bray, Kehle, Theodore, & Gelbar, 2011).

Studies conducted in Europe (Casas et al., 2009; Goldbeck, Schmitz, Besier, Herschbach, & Henrich, 2007) and Australia (Tomyn & Cummins, 2010) revealed findings of a considerable decline in SWB from early to middle adolescence, with the SWB of 16-year-olds significantly lower than that of the younger adolescents. The findings pertaining to the contribution of a secure parental relationship, in the context of a sense of personal well-being among adolescents, varied among different studies. One study identified three dimensions through which the adolescents defined their well-being: being valuable, capable, and confident. The study respondents felt that these features could be related to interpersonal relationships, such as their relationship with their parents (Shenar-Golan & Walter, 2015). The respondents also cited other elements contributing to well-being, such as fun activities, good health, the ability to cope with stress, eating, and physical activity (Fattore, Mason, & Watson, 2009).

Studies have indicated that a high level of well-being serves as a helpful coping factor. A high level of well-being stimulates social skills, curiosity, and vitality, prompting individuals to make decisions and even stirring their creative thinking (Proctor et al., 2009; Suldo, Huebner, Friedrich, & Gilman, 2009). In contrast, adolescents with lower well-being have been reported to suffer significantly more from conflict with family members and feeling like they do not have enough friends or money (Axford, Jodrell, & Hobbs, 2014).

Research studies based on a hedonistic approach to the topic of individual well-being among youth usually focus on examining the adolescent’s feelings of satisfaction, showing that well-being at this age is connected to a variety of personal characteristics. This includes a sense of capability and extroversion, environmental characteristics such as the extent of parental support, age-related factors affecting the nature of the parent–child relationship, how adolescents perceive themselves, and how they think others see them (Suldo et al., 2009). As noted above, body image has emerged in studies as a significant factor affecting health and well-being during adolescence (e.g., Bearman et al., 2006; Delfabbro et al., 2011). Poor body image has also been indicated to affect adolescent SWB (Holsen et al., 2012; Ronen & Seeman, 2007; Rosenbaum & Ronen, 2013).

In the current study, the relationship between adolescent boys’ SWB and their body image was tested by the following research hypotheses:
Hypothesis 1: Differences in body image, parent–adolescent relationships, and SWB will be indicated for adolescents belonging to different age groups ranging from early to late adolescence.

Hypothesis 2: A positive association will be reported between body image and SWB among adolescent boys, and negative correlations will be reported between BMI and body image and BMI and SWB.

Hypothesis 3: Parent–adolescent relationships will moderate the association between body image and SWB such that a positive parent–adolescent relationship will influence the strength of the relation between body image perception and adolescent SWB.

Method

Sample

One hundred and seven adolescent boys in Israel participated in the research, ranging in age from 13 to 18 years (M = 15.44, SD = 1.31). The participants were divided into three mean age groups: 13 to 14 years (n = 27, 25.2%), 15 to 16 years (n = 55, 51.4%), and 17 to 18 years (n = 20, 18.7%). The participants ranged in height from 1.19 to 1.500 m (M = 1.71, SD = 0.078), and in weight from 33 to 110 kg (M = 62.15, SD = 11.81). Height and weight were used to measure BMI (BMI = kg/m²). According to the BMI measurements, 76.6% (n = 82) of participants were of normal weight, 10.3% (n = 11) were overweight, and 5.6% (n = 6) were underweight (M = 20.97, SD = 3.39).

Measures

Five questionnaires were utilized in the research study:

Research Question 1: Body mass index (BMI = kg/m²) is used to measure adiposity (Pietrobelli et al., 1998). Height was measured to the nearest millimeter using stadiometers, and weight was measured with digital scales. A BMI of less than 18.5 is considered underweight, 18.5 to 24.9 is considered normal and optimal, and over 25 is considered overweight (National Heart Foundation in association with the Faculty of Public Health and Department of Health, 2007).

Research Question 2: Body image was assessed using the Body Investment Scale (BIS) developed by Orbach and Mikulincer (1998). The BIS is a 24-item scale assessing emotional investment in the body and consists of four unique subscales: feelings and attitudes toward the body (e.g., “I am satisfied with my appearance”), comfort with physical touch (e.g., “I enjoy physical contact with other people”), body care (e.g., “I like to pamper by body”), and body protection (e.g., “I’m not afraid to engage in dangerous activities”). Each of the four subscales consists of six items and is responded to with a 5-point scale ranging from strongly disagree to strongly agree. The scores for each subscale are obtained by averaging item responses within each subscale, and higher scores indicate more positive feelings about and investment in the body. Research on the BIS has provided evidence of adequate reliability and validity with clinical and nonclinical adolescent samples (Orbach & Mikulincer, 1998). In the current study, the BIS subscales were used as indicators of the latent construct, body image. Internal consistency estimates for each of the subscales within the current sample were performed, and Cronbach’s alpha for the four subscales was .73, .68, .66, and .56, respectively. Each of the four factors was also averaged separately.

Research Question 3: The parent–adolescent relationship was assessed using the Parental Attachment Scale developed by C. L. Chapple in 2003 (Fischer & Corcoran, 2006). The Parental Attachment Scale is a 6-item scale designed to assess parental attachment as a measure of parental control. The scale is based on the social control theory of Hirschi, which postulates that attachment to parents is primary in life and is the affective dimension of the social bond. The sum of the items is totaled for an overall score ranging from 0 to 24. Higher scores indicate greater attachment to parents. In the current study, Cronbach’s alpha was .69.

Research Question 4: The subjective sense of well-being was assessed using the Personal Well-Being Index (International Wellbeing Group, 2006). The Personal Well-Being Index is composed of one overall question inquiring about satisfaction with life as a whole, and eight items measuring satisfaction in specific life domains: standard of living, personal health, achieving in life, personal relationships, personal safety, community connectedness, future security, and religion. All items were rated on a scale ranging from 0 = completely dissatisfied to 10 = completely satisfied. In the current study, the internal reliability was high, with α = .81.

Research Question 5: Participants completed a demographic questionnaire of personal details including sex, age, grade, birth order, height, and weight.

Procedure

The research questionnaires were displayed with the school principal’s permission in a regional high school in Northern Israel after they were approved by the institutional review board. Students were approached in class and asked to complete the questionnaires anonymously. It was made clear that participation in the research was voluntary. The data were cleaned, coded, and analyzed using SPSS version 18 (SPSS Inc., Chicago, IL). Descriptive statistics were used to describe the sample and the main variables.
Table 1. Pearson correlations Averages, standard deviations and Manova test results for the relationship of SWB, body image (BIS Index), and parent-adolescent relationship to different age groups (N = 107).

|                  | Older (15.5-18; n = 56) | Younger (13-15.5; n = 51) |
|------------------|-------------------------|--------------------------|
|                  | SD  | M     | SD  | M     | F(1, 105) | p    | η^2 |
| SWB              | 1.4 | 7.9   | 1.5 | 7.9   | 0.016     | .89  | .000 |
| BIS Index        | 0.35| 3.59  | 0.33| 3.64  | 0.574     | .45  | .005 |
| Parent–adolescent relationship | 3.36| 18.71| 3.20| 19.27| 0.77      | .38  | .007 |

Note. SWB = subjective well-being; BIS = Body Investment Scale.

*p < .05. **p < .01. ***p < .001.

Results

Various analyses of the data were performed: A multivariate analysis of variance analysis was conducted to assess the effect of body image, SWB, and parent–adolescent relationship across the different age groups (Table 1). Pearson correlations were computed to analyze the relationships between SWB, the dependent variable, body image, the independent variable, BMI and age group as objective measures, and the parent–adolescent relationship as the moderating variable. The parent–adolescent relationship was analyzed in relation to body image and SWB. A partial Pearson correlation was computed to assess the connection between SWB and body image. Finally, a stepwise multiple regression was performed to determine the contribution of the independent variables to explaining the variance in SWB.

An examination of the effect of age group on SWB, body image, and parent–adolescent relationship revealed no significant effect of age group on the variables when measured individually. SWB, F(1, 105) = 0.377, p > .05, η^2 = 0.011. The results also demonstrated no significant effect of age group on the variables measured individually: SWB, BMI, and parent–adolescent relationship, F(1, 105) = 0.016, p > .05 (p = .89), η^2 = 0.00; body image (BIS Index), F(1, 105) = 0.574, p > .05 (p = .45), η^2 = 0.005; and parent–adolescent relationship, F(1, 105) = 0.77, p > .05 (p = .38), η^2 = 0.007.

The hypothesis that age would affect these variables was not supported (Table 2); hence, subsequent analysis was conducted on the entire sample as one age group, with the following exception. The initial finding of no significant effect of age group on BIS Index led us to conduct a further analysis between age group and body image (BIS) factors. The relationship of age group to two factors, body image feelings and attitudes and comfort in touch, was demonstrated to be statistically significant. Body image feelings and attitudes was reported to have a negative correlation, while comfort in touch was reported to have a positive correlation. Moreover, BMI was demonstrated to be positively correlated with age group, r(107) = .407, p < .001.

Pearson correlations were conducted to examine the relationship between the dependent variable, participants’ SWB, the independent variable of body image (including BIS Index and BIS factors), the variable BMI, and the moderating variable, the parent–adolescent relationship. The relationship was demonstrated to be statistically significant, indicating a positive medium correlation between SWB and body image (BIS Index), r(107) = .336, p < .001. A strong correlation was demonstrated between SWB and the factor body image feelings and attitudes, r(107) = .634, p < .001. A low–medium correlation was demonstrated between SWB and parent–adolescent relationship, r(107) = .258, p < .01.

Pearson correlations were also conducted to examine the relationship among the independent variables (parent–adolescent relationship, BIS index, factors, and BMI). A medium correlation was demonstrated between body image and parent–adolescent relationship (BIS Index), r(107) = .266, p < .01 and a negative low correlation was demonstrated between body image (BIS Index) and BMI, r(107) = -.271, p < .01. In addition, the factor body image feelings and attitudes was demonstrated to have a negative correlation to BMI. A negative correlation was also demonstrated between BMI and parent–adolescent relationship.

Table 3 presents the intercorrelations among the variables parent–adolescent relationship, body image (BIS Index), and SWB (dependent variable). The intercorrelations among the three variables were statistically significant, r(392), p < .001. Both body image (BIS Index) and the parent–adolescent relationship were significantly correlated to SWB. The model was statistically significant, F(3, 103) = 6.22, p < .001, and accounted for approximately 39% of the variance of SWB. The moderation was tested by adding the variable parent–adolescent relationship × body image into the regression model. The regression model indicated that the intercorrelations of the predictor parent–adolescent relationship and BIS Index were not significant, F(3, 103) = 6.22, p = ns (.34).

A stepwise multiple regression was performed utilizing body image (Index and components) and the parent–adolescent relationship to predict adolescent boys’ SWB. The results are presented in Table 4.

Based on the unstandardized regression coefficients, one can see a positive correlation between SWB and the
Table 2. Pearson Correlation: Body Image, BMI, Parent–Adolescent Relationship, Age Group, SWB.

| Variables                      | 1   | 2    | 3    | 4    | 5    | 6    | 7    | 8    |
|-------------------------------|-----|------|------|------|------|------|------|------|
| 1. Body image feelings and   |     |      |      | 0.540*** | -0.349*** | 0.286*** | -0.210h | 0.634*** |
| attitudes                     |     |      |      |      |      |      |      |      |
| 2. Comfort in touch           | 0.129 | -0.031 | 0.489*** | -0.002 | 0.041 | 0.281** | -1.01 |      |
| 3. Body care                  | 0.199* |      | 0.584*** | -0.169 | 0.129 | -0.14 | 0.044 |      |
| 4. Body protection            | 0.547*** |      | -0.039 | 0.094 | -0.132 | 0.165 |      |      |
| 5. BIS Index                  |      |      | -0.271** | 0.266** | -0.091 | 0.336*** |      |      |
| 6. BMI                        |      |      | -0.182 | 0.407*** | -0.164 |      |      |      |
| 7. Parent–adolescent          |      |      |      |      |      |      |      |      |
| relationship                 |      |      |      |      |      |      |      |      |
| 8. Age group                  |      |      |      |      |      |      |      | -0.140 |

Note. SWB = subjective well-being; BMI = body mass index.
* p < .05. ** p < .01. *** p < .001.

Table 3. Intercorrelations Among Parent–Adolescent Relationship, Body Image, SWB.

| Variables                      | B   | SE B | T     |
|-------------------------------|-----|------|-------|
| Body image                    | 1.24 | 0.298 | 3.15*** |
| Parent–adolescent relationship| 0.093 | 0.214 | 2.145* |
| × body image                  | 0.108 | 0.094 | 0.962 |
| $R^2$                         | 0.392 |      |       |
| $F$                           | 6.22*** |      |       |

Note. SWB = subjective well-being; SE = standard error.
* p < .05. ** p < .01. *** p < .001.

Table 4. Prediction of SWB by Body Image Factor Feelings and Attitudes.

| Variables                      | B   | SE B | T     |
|-------------------------------|-----|------|-------|
| Body image feelings and attitudes | 1.26 | 0.151 | 0.634*** |

Note. SWB = subjective well-being; SE = standard error.
* p < .05. ** p < .01. *** p < .001.

Discussion

This research assessed and evaluated the effect of adolescent boys’ body image (independent variable) and their relationship with their parents (independent variable) on their SWB (dependent variable). The hypothesis that age would affect the measures of the BIS Index, the parent–adolescent relationship, and SWB was not supported. The results indicated no significant effect for age group on these research variables. These results contradict studies indicating an effect of the different adolescent stages on adolescent well-being (Tomyn & Cummins, 2010), parent–adolescent relationships (Morin, Maiano, Marsh, Janosz, & Nagengast, 2011), and boys’ body image (Bearman et al., 2006; Rosenblum & Lewis, 1999). The results might indicate that the way adolescents formulate and define their body image ideals is influenced by personal and cultural factors, physical changes, and by the parent–adolescent relationship (Bearman et al., 2006) and that age plays a secondary role.

Interestingly, the secondary analysis of the impact of age group on body image factors revealed different findings. The factor body image feelings and attitudes was demonstrated to be negatively correlated to age group, indicating that an older age group was negatively associated with body image feelings and attitudes. These findings are consistent with previous studies indicating that subjective ratings of body image remain relatively stable across the early teenage years but become increasingly negative at around 15 to 18 years because of pubertal changes (Rosenblum & Lewis, 1999). An analysis in this study of the BIS factor comfort in touch yielded the opposite result. Comfort in touch, a foundation for self-development related to enjoying physical contact with others (Orbach & Mikulincer, 1998), increased in the later adolescent years, presumably because the maturing male physique corresponds to the muscular ideal associated with masculinity and increasing interest in intimate relationships.

Furthermore, results from the current research emphasize the effect of physical appearance through the relationship between the variables BMI and body image. As the BMI decreased, the BIS Index and the factor body image feelings and attitudes increased. These results confirm those of previous studies (Jones & Crawford, 2005; Paxton et al., 2006), suggesting that body dissatisfaction is linked to BMI and muscularity concerns, where body
dissatisfaction represents a feeling individuals may have toward their own bodies. Moreover, they are consistent with studies (Holsen et al., 2012; Wallander et al., 2009) demonstrating that BMI affects the perceptions of physical appearance and body size.

The assessment of the relationship between body image and SWB revealed important findings consistent with previous studies (e.g., Bearman et al., 2006; Delfabbro et al., 2011) in which body image emerged as a significant factor affecting health and well-being during adolescence. In this study, the factor body image feelings and attitudes had the strongest relationship to adolescent well-being. The factor body image feelings and attitudes develops in relation to bodily changes in adolescents and is greatly influenced by social standing, self-confidence, and family relationships (Cong et al., 2013). The direct and positive relationship between the factor body image feelings and attitudes and SWB might result from sociocultural influences (Slater et al., 2012). During this developmental phase, adolescents are influenced by messages they receive from their closest circle (family) and from their surrounding community (cultural) that define their body image. The rejection or internalization of such messages can influence adolescents’ sense of well-being (van den Berg et al., 2010).

Previous studies have indicated a direct link between perceived parental relationship and SWB (Bearman et al., 2006; Ronen & Seeman, 2007; Rosenbaum & Ronen, 2013). Studies have also indicated that adolescents’ negative body image perception is correlated to negative perception of their parental relationship and negative SWB (Mancini, 2008). Bearman et al. (2006) suggested that supportive family relationships provide security at a time when adolescents strive to gain social acceptance through conformity with body ideals. Interestingly, the results here indicated that the parent–adolescent relationship has no moderating effect on the intercorrelation between adolescent boys’ SWB and body image, questioning the effect of the parent–adolescent relationship on these variables. These findings may be explained by the primacy of social acceptance in adolescence. Jones and Crawford (2005) suggested that peer relations have greater impact on adolescent boys’ body image than parental relations. Body image is acutely affected by BMI; previous studies have emphasized that both low BMI and high BMI implicate adolescent boys’ concerns over appearance and body image. During adolescence, when boys are undergoing sexual experiences for the first time and testing preferences and new behaviors, negative feelings about their bodies may explain the more minimal effect of the parent–adolescent relationship on their body image and SWB (Schooler, Impett, Hirschman, & Bonem, 2008).

Regression analysis findings indicated that the BIS factor body image feelings and attitudes is the primary and only predictor of SWB that is based on adolescent perception. As noted above, the perceived parental relationship was significantly and positively linked with both adolescent SWB and body image. This finding is supported by results of research by van den Berg et al. (2010), demonstrating that messages related to body image can influence adolescents’ sense of well-being.

The results of this study should be considered in light of certain limitations. First, the population sample of 107 adolescent boys was relatively small and can be enlarged in future studies. Second, because all information was derived from adolescent self-reports, future studies should employ a multiple-informant approach that includes parent attitude and perception toward their relationships with their children, as well as the climate of the school system toward the research variables (body image, parent–adolescent relationship, SWB). Furthermore, it is recommended to conduct a prospective study on changes of SWB and body image throughout adolescence, using either mixed-level models or structural equation modeling to determine how SWB and body image change as age increases. Finally, in future studies, other variables related to body image should be added to these models to examine their influence on the relationship between SWB and body image.

Conclusion

This research study explored the relationship between adolescent boys’ body image, their SWB, and the parent–adolescent relationship. The adolescent years, characterized by emotional upheaval and extreme hormonal and physical changes, increase the stress and conflict between adolescents and their parents (Shenaar-Golan & Walter, 2015). The current research findings emphasize the importance of positive body image to adolescent SWB, particularly positive body image as expressed by feelings and attitudes. The results demonstrated the importance of the BIS factor body image feelings and attitudes over the other three BIS factors (body care, body protection, and comfort in touch). This factor is based on perception, whereas the other three factors are based on behaviors, emphasizing the importance of paying attention to the consequences at this age of physical changes and emotional upheaval that create this perception.

Notwithstanding the current findings that the parent–adolescent relationship does not influence adolescent boys’ body image, parental awareness is still very important for developing positive attitudes and feelings. Identification of boys’ body image perceptions at the onset of adolescence, when parents still yield influence, can help prevent negative feelings and attitudes. Parent understanding that their influence gives way to peer influence as adolescence progresses can help them support
their sons in coping with this pressure. Together with professionals, parents can help their sons develop health-promoting behaviors and body acceptance.

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References
Andrews, F. M., & Robinson, J. P. (1991). Measures of subjective well-being. San Diego, CA: Academic Press.
Axford, N., Jodrell, D., & Hobbs, T. (2014). Objective or subjective well-being? In A. Ben-Arieh, F. Casas, I. Frønes & J. E. Korbin (Eds.), Handbook of child well-being (pp. 2699-2738). Dordrecht, Netherlands: Springer.
Bearman, S. K., Martinez, E., Stice, E., & Presnell, K. (2006). The skinny on body dissatisfaction: A longitudinal study of adolescent girls and boys. Journal of Youth and Adolescence, 35, 217-229.
Blodgett Salafia, E. H., Gondoli, D. M., Corning, A. F., McEnery, A. M., & Grundy, A. M. (2007). Psychological distress as a mediator of the relation between perceived maternal parenting and normative maladaptive eating among adolescent girls. Journal of Counseling Psychology, 54, 434-446.
Boutelle, K., Eisenberg, M. E., Gregory, M. L., & Neumark-Sztainer, D. (2009). The reciprocal relationship between parent–child connectedness and adolescent emotional functioning over 5 years. Journal of Psychosomatic Research, 66, 309-316.
Burlow, L. D., & Shurts, W. M. (2013). Men and body image: Current issues and counseling implications. Journal of Counseling & Development, 91, 428-435.
Carter, J. S., Smith, S., Bostick, S., & Grant, K. E. (2014). Mediating effects of parent–child relationships and body image in the prediction of internalizing symptoms in urban youth. Journal of Youth and Adolescence, 43, 554-567.
Casas, F., González, M., Figuer, C., & Malo, S. (2009). Satisfaction with spirituality, satisfaction with religion and personal well-being among Spanish adolescents and young university students. Applied Research in Quality of Life, 4, 23-45.
Cash, T. F., & Smolak, L. (2011). Understanding body images: Historical and contemporary perspectives. In T. F. Cash & L. Smolak (Eds.), Body image: A handbook of science, practice, and prevention (pp. 3-11). New York, NY: Guilford Press.
Coccia, C., Darling, C., Rehm, M., Cui, M., & Sathe, S. (2012). Adolescent health, stress, and life satisfaction: The paradox of indulgent parenting. Stress & Health, 28, 211-221.
Cong, L., Rebecca, P. A., & May, O. L. (2013). Cognitive, personality, and social factors associated with adolescents’ online personal information disclosure. Journal of Adolescence, 36, 629-638.
Crespo, C., Kielpikowski, M., Jose, P. E., & Pryor, J. (2010). Relationships between family connectedness and body satisfaction: A longitudinal study of adolescent girls and boys. Journal of Youth and Adolescence, 39, 1392-1401.
Delfabbro, P. H., Winefield, A. H., Anderson, S., Hammarström, A., & Winefield, H. (2011). Body image and psychological well-being in adolescents: The relationship between gender and school type. Journal of Genetic Psychology, 172, 67-83.
Diener, E. (1984). Subjective well-being. Psychological Bulletin, 95, 542-575.
Diener, E. (2006). Guidelines for national indicators of subjective well-being. Journal of Happiness Studies, 7, 397-404.
Diener, E., Lucas, R. E., & Oishi, S. (2002). Subjective well-being, the science of happiness and life satisfaction. In C. R. Snyder & S. J. Lopez (Eds.), Handbook of positive psychology (pp. 63-73). Oxford, England: Oxford University Press.
Engeln, R., Sladek, M. R., & Waldron, H. (2013). Body talk among college men: Content, correlates, and effects. Body Image, 10, 300-308.
Erikson, E. (1950). Childhood and society. New York, NY: Norton.
Erikson, E. (1968). Identity: Youth and crisis. New York, NY: Norton.
Fattore, T., Mason, J., & Watson, E. (2009). When children are asked about well-being: Towards a framework for guiding policy. Child Indicator Research, 2, 57-77.
Fischer, J., & Corcoran, K. (Eds.). (2006). Measures for clinical practice and research: A sourcebook, volume 1: Couples, families, and children. New York, NY: Oxford University Press.
Fleming, C. B., Catalano, R. F., Haggerty, K. P., & Abbott, R. D. (2010). Relationships between level and change in family, school, and peer factors during two periods of adolescence and problem behavior at age 19. Journal of Youth and Adolescence, 39, 670-682.
Flum, H. (1995). Mitbagrim be-Yisrael: Hebaytim ishi'im, mishpahti'im ve-hevrut'i'im [Adolescents in Israel: Personal, family and social aspects]. Even Yehuda, Israel: Reches.
Frederick, D. A., Buchanan, G. M., Sadehgi-Azar, L., Peplau, L. A., Haselton, M. G., & Berezovskaya, A. (2007). Desiring the muscular ideal: Men’s body satisfaction in the United States, Ukraine, and Ghana. Psychology of Men & Masculinity, 8, 103-117.
Gall, N., Reel, J. J., Petrie, T., Greenleaf, C., & Carter, J. (2011). Preliminary development of the weight pressures in sport scale for male athletes. Journal of Sport Behavior, 34, 47-68.
Gilman, R., & Huebner, S. (2003). A review of life satisfaction research with children and adolescents. School Psychology Quarterly, 18, 192-205.
Goldbeck, L., Schmitz, T. G., Besier, T., Herschbach, P., & Henrich, G. (2007). Life satisfaction decreases during adolescence. Quality of Life Research, 16, 969-979.
Greenberg, L., & Ben Bessat, V. (2009). Tfisat dimui atzmi, dimui guf, hergelei pe’ilut gufanit ve-tzuna b’kerev mit-bagrot [Perception of self-esteem, body image, and exercise and nutrition habits among adolescent girls]. B’Tnuat (In Movement), 9, 217-236.

Grogan, S. (2008). Body image: Understanding body dissatisfaction in men, women and children (2nd ed.). London, England: Taylor & Francis.

Helfert, S., & Warschburger, P. (2011). A prospective study on the impact of peer and parental pressure on body dissatisfaction in adolescent girls and boys. Body Image, 8, 101-109.

Holsen, I., Jones, D. C., & Birkeland, M. S. (2012). Body image satisfaction among Norwegian adolescents and young adults: A longitudinal study of the influence of interpersonal relationships and BMI. Body Image, 9, 201-208.

International Wellbeing Group. (2006). Personal Wellbeing Index (5th ed.). Melbourne, Victoria, Australia: Australian Centre on Quality of Life, Deakin University.

Jones, D. C., & Crawford, J. K. (2005). Adolescent boys and body image: Weight and muscularity concerns as dual pathways to body dissatisfaction. Journal of Youth and Adolescence, 34, 629-636.

Jones, D. C., Vigfusdottir, T. H., & Lee, Y. (2004). Body image and the appearance culture among adolescent girls and boys: An examination of friend conversations, peer criticism, appearance magazines, and the internalization of appearance ideals. Journal of Adolescent Research, 19, 323-339.

Keyes, C. L. (2006). Mental health in adolescence: Is America’s youth flourishing? American Journal of Orthopsychiatry, 76, 395-402.

Koepeke, S., & Denissen, J. J. (2012). Dynamics of identity development and separation-individuation in parent–child relationships during adolescence and emerging adulthood: A conceptual integration. Developmental Review, 32, 67-88.

Kurtz, L. (2010). Dimiuzatmiz-dimiuquf [Self image and body image]. Israeli Oncological Nursing Newsletter, 19(4).

Lewinsohn, P. M., Seeley, R. J., Moer, K. C., & Strievel-Moore, R. H. (2002). Gender differences in eating disorder symptoms in young adults. International Journal of Eating Disorders, 32, 426-440.

Mancini, A. D. (2008). Self-determination theory: A framework for the recovery paradigm. Advances in Psychiatric Treatment, 14, 358-365.

Marceau, K., Ram, N., & Susman, E. J. (2015). Development and lability in the parent–child relationship during adolescence: Associations with pubertal timing and tempo. Journal of Research on Adolescence, 25, 474-489.

McCabe, K., Bray, M. A., Kehle, T. J., Theodore, L. A., & Gelbar, N. W. (2011). Promoting happiness and life satisfaction in school children. Canadian Journal of School Psychology, 26, 177-192.

McGue, M., Elkins, I., Walden, B., & Iacono, W. G. (2005). Perceptions of the parent-adolescent relationship: A longitudinal investigation. Developmental Psychology, 41, 971-984.

Michael, S. L., Wentzel, K., Elliott, M. N., Dittus, P. J., Kanouse, D. E., Wallander, J. L., . . . Schuster, M. A. (2014). Parental and peer factors associated with body image discrepancy among fifth-grade boys and girls. Journal of Youth and Adolescence, 43, 15-29.

Morin, A. J., Maiano, C., Marsh, H. W., Janosz, M., & Nagengast, B. (2011). The longitudinal interplay of adolescents’ self-esteem and body image: A conditional autoregressive latent trajectory analysis. Multivariate Behavioral Research, 46, 157-201.

National Heart Foundation in association with the Faculty of Public Health and Department of Health. (2007). Lightening the load: Tackling overweight and obesity: A toolkit for developing local strategies to tackle overweight and obesity in children and adults. Retrieved from http://www.hpac.cdd.nhs.uk:8080/HPAC/ClickCounter?action=d&resourceld=11074&url=%27uploads/hpdurhamdalington/pdf/B093261.pdf%27

Orbach, I., & Mikulincer, M. (1998). The Body Investment Scale: Construction and validation of a body experience scale. Psychological Assessment, 10, 415-425.

Orkibi, H., Ronen, T., & Assoulin, N. (2014). The subjective well-being of Israeli adolescents attending specialized school classes. Journal of Educational Psychology, 106, 515-526.

Paxton, S. J., Eisenberg, M. E., & Neumark-Sztainer, D. (2006). Prospective predictors of body dissatisfaction in adolescent girls and boys: A five-year longitudinal study. Developmental Psychology, 42, 888-899.

Paxton, S. J., Wertheim, E. H., Gibbons, K., Szmukler, G. I., Hillier, L., & Petrovich, J. L. (1991). Body image satisfaction, dieting beliefs, and weight loss behaviors in adolescent girls and boys. Journal of Youth and Adolescence, 20, 361-379.

Pietrobelli, A., Faith, M. S., Allison, D., Chiumello, G., & Heymsfield, S. (1998). Body mass index as a measure of adiposity among children and adolescents: A validation study. Journal of Pediatrics, 132, 204-210.

Proctor, C. L., Linley, P. A., & Maltby, J. (2009). Youth life satisfaction: A review of the literature. Journal of Happiness Studies, 10, 583-630.

Rejeski, W., & Mihalko, S. (2001). Physical activity and quality of life in older adults. Journal of Gerontology: Series A, 56, 23-35.

Ricciodelli, L. A., McCabe, M. P., Lillis, J., & Thomas, K. (2006). A longitudinal investigation of the development of weight and muscle concerns among preadolescent boys. Journal of Youth and Adolescence, 35, 168-178.

Ronen, T., & Seeman, A. (2007). Subjective well-being of adolescents and young adults: A longitudinal investigation. Developmental Psychology, 43, 101-109.

Rosenbaum, M., & Ronen, T. (2013). Emotional well-being and self-control skills of children and adolescents: The Israeli perspective. In C. L. M. Keyes (Ed.), Mental well-being (pp. 209-229). New York, NY: Springer.

Rosenblum, G. D., & Lewis, M. (1999). The relations among body image, physical attractiveness, and body mass in adolescence. Child Development, 70, 50-64.
Schachter, E. P., & Ventura, J. J. (2008). Identity agents: Parents as active and reflective participants in their children's identity formation. *Journal of Research on Adolescence, 18*, 449-476.

Schooler, D., Impett, E., Hirschman, C., & Bonem, L. (2008). A mixed-method exploration of body image and sexual health among adolescent boys. *American Journal of Men's Health, 2*, 322-339.

Shanahan, L., McHale, S. M., Crouter, A. C., & Osgood, D. W. (2007). Warmth with mothers and fathers from middle childhood through adolescence: Within and between family comparisons. *Developmental Psychology, 43*, 551-563.

Shenaar-Golan, V., & Walter, O. (2015). Mother-daughter relationship and daughter's body image. *Health, 7*, 547-559.

Silva, M. (2006, April). *Body image dissatisfaction: A growing concern among men*. Retrieved from https://community.msoe.edu/community/campus-life/student-resources/blog/2013/08/21/body-image-dissatisfaction-a-growing-concern-among-men

Slater, A., Tiggemann, M., Hawkins, K., & Werchon, D. (2012). Just one click: A content analysis of advertisements on teen websites. *Journal of Adolescent Health, 50*, 339-345.

Steinberg, L., Dahl, R., Keating, D., Kupfer, D. J., Masten, A. S., & Pine, D. S. (2006). The study of developmental psychopathology in adolescence: Integrating affective neuroscience with the study of context. In D. C. D. J. Cohen (Ed.), *Developmental psychopathology, Vol. 2: Developmental neuroscience* (2nd ed., pp. 710-741). Hoboken, NJ: John Wiley.

Suldo, S. M., Huebner, E. S., Friedreich, A. A., & Gilman, R. (2009). Life satisfaction. In R. Gilman, E. S. Huebner, & M. Furlong (Eds.), *Handbook of positive psychology in the schools* (pp. 27-35). New York, NY: Routledge.

Tamir, T. (2011). *Nashim le-gufan* [Women on their bodies]. Ben Shemen, Israel: Modan.

Te’omim, S. (2006). *Mar’a mar’a she’al ha’kir, mi ha-yafa be-chol ha-ir?* [Mirror, mirror on the wall, who is the prettiest of them all?]. Retrieved from http://lib.cet.ac.il/Pages/item.asp?item=13258&kwd=7424

Thompson, J. K., & Stice, E. (2001). Thin-ideal internalization: Mounting evidence for a development and implementation of the body logic program for adolescents: A two-stage prevention program for eating disorder. *Cognitive and Behavioral Practice, 8*, 248-259.

Tomyn, A. J., & Cummins, R. A. (2010). Subjective wellbeing and homeostatically protected mood: Theory validation with adolescents. *Journal of Happiness Studies, 12*, 897-914.

Tomyn, A. J., & Cummins, R. A. (2011). The subjective wellbeing of high-school students: Validating the Personal Wellbeing Index–School Children. *Social Indicators Research, 101*, 405-418.

van den Berg, P., Keery, H., Eisenberg, M., & Neumark-Sztainer, D. (2010). Maternal and adolescent report of mothers' weight-related concerns and behaviors: Longitudinal associations with adolescent body dissatisfaction and weight control practices. *Journal of Pediatric Psychology, 35*, 1093-1102.

Verstuyf, J., Van Petegem, S., Vansteenkiste, M., Soenens, B., & Boone, L. (2014). The body perfect ideal and eating regulation goals: Investigating the role of adolescents' identity styles. *Journal of Youth and Adolescence, 43*, 284-297.

Wallander, J. L., Taylor, W. C., Grunbaum, J. A., Franklin, F. A., Harrison, G. G., Kelder, S. H., & Schuster, M. A. (2009). Weight status, quality of life, and self-concept in African American, Hispanic, and white fifth-grade children. *Obesity, 17*, 1363-1368.