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Understanding the body image of adolescents: A psychological perspective

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Abstract

This article discusses about different aspects and issues of body image among adolescents. Body image is a dynamic concept which is defined as subjective feeling about one's own appearance. It has two facets: positive and negative body image, which plays important role in identity formation of an individual. Positive body image facilitates psychosocial functioning whereas negative body image leads to dissatisfaction and lowered self-worth in individuals. Adolescence is a stage of life where body image is very crucial which is formed and influenced by different psycho-social factors. Body image can be understood through the lens of gender, with boys desiring to be muscular and girls desiring to be thinner. Body image is largely influenced by family, peers, media and culture. These factors play an important role in developing ideals of appearance as an important aspect of body image among individuals. Body image has wider psycho-social implications in the functioning of an individual's life, especially during adolescence.

Keywords: Body Image, adolescence, gender, psycho-social factors

Introduction

Understanding the Body Image of Adolescents: A Psychological Perspective

The general notion of body image differs from the definitions given in the scientific literature. The responses given by laymen relate body image to outward physical appearance, attractiveness, or weight status that does not match with the subjective aspects of body image (Cash & Smolak, 2011) [9]. Body image is defined as a multidimensional construct that includes cognitive, behavioral, attitudinal, and emotional components (Cash & Purzinsky, 2002) [11, 12]. It is an established fact that body image plays an important role in self-worth and mental health across the life span (Harter, 1990, 1991) [33, 34]. Body image can be understood in terms of body appearance, body dissatisfaction, body recognition, body art, body checking behaviour, and body image investment. Body image is an important aspect of self-concept, self-esteem, body esteem. It covers the entire life span of the individual. But adolescence is a stage where body image matters in decision making, selecting friends, and establishing interpersonal relationships.

Body Image

The distinguished neurologist Henry Head (1920) [37], described the body image as a unity of experience of past linked with the present body sensation, organized in the sensory cortex of the cerebrum. Schielder (1935/1950) [62] upgraded the study of body experience, taking it beyond the perceptions induced by brain damage (Fisher, 1990) [24]. Subsequently, Seymour Fisher studied body image from a psychoanalytic perspective, published paper on the "body boundary" construct (Fisher & Cleveland, 1968) [25]. The term body image overlaps with concepts like ego, self, and self-concept. Body image was considered instrumental to ego development by Freud (Fisher & Cleveland, 1958) [23]. His theory of libido and erogenous zone is stated almost in terms of body zones area of sensitivity. Franklin Shontz (1969) [26], who was critical of psychodynamic perspective, regarded body experiences as multi-dimensional, and applied scientific findings to understand and help the persons with physical disabilities (Shontz, 1990) [64].

Many studies have pointed out certain traits associated with positive body image, incorporating happiness (Grogan, 1999) [30], and high self-esteem (Swami, Airs, Leon,

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Chouhan, & Towell, 2009)^[69] and feeling of satisfaction with one's body (Wood et al. 2010)^[83]. Impact of negative body image can be observed through different psychological and cognitive aspects of body. The main behavioural effect of negative body image is body dissatisfaction leads to the individual to alter one's body shape through restrictive eating, dieting, and excessive physical activity etc. Body dissatisfaction is defined as negative self-evaluation of one's body shape and weight (Cash & Pruzinsky, 1990)^[13]. Body dissatisfaction is behaviourally manifested through body checking that is over concerned with shape and weight (Shafran, Fairburn, Robinson, & Lask, 2004)^[63].

Body image through Varied Perspectives

There are different perspectives to understand body image. Genetic and biological factors play an important role in the development of body image and associated problems. Twin and adoption studies demonstrate the effect of genetic factors on body image problems. Scientists are trying to narrow down the role of particular genes that may influence body image disturbances through molecular geneticists. Advances in neuro-imaging techniques have allowed scientists for the exploration of specific areas of the brain that may influence body image problems.

The socio-cultural perspective highlights the role of social ideals within the cultural backdrop. These ideals influence and guide the individual's level of satisfaction with respect to their appearance. The Cognitive Behavioural model emphasizes that body image is influenced by the current life events of the individual and the impact of precipitating experiences that influences body image, including information processing, emotions, and self-regulatory actions. Fritz & Heider (1958)^[38] described social cognition as one's perception of others' attitudes, emotions, behaviours, and the manner in which they relate with other people. This process takes place through schemas that the person develops of others and about oneself with respect to body image. The schemas so developed guide the individual's behaviour towards body image of self and others in social interactions.

Positive and negative body image

Body image is a multidimensional construct with both positive and negative aspects. Negative body image involves distorted perception of shape, size and appearance as well as global feelings of shame and anxiety about the body. On the other hand positive body image is having realistic perception of one's body and feeling good about it as it is.

Until recent time, the major work in theory, research, and practice have focused on understanding, preventing, and treating its negative features. In the first edition of the handbook, Cash and Pruzinsky (2002)^[11, 12] recognized the imbalance, and labelled it "pathology-driven." They called for a paradigm shift—to examine the experience of positive body image and identify factors that promote and emerge from it. Positive body image can be undertaken to promote additional research in the area.

Body image research has been pathology focused, centring on the negative aspects of body image (Cash & Pruzinsky, 2002; Tylka, 2011)^[11, 12, 76]. Body dissatisfaction often arises when individuals compare themselves to an "ideal" shape or weight that is different from their current size (Williamson, Gleaves, Watkins, & Schlundt, 1993)^[82]. For women, the ubiquitous standard in the Western media is that

of the "thin ideal," in which females are expected to be "young, tall, thin, and white, with at least moderately large breasts."

Positive body image can be described as body appreciation, which involves appreciation, acceptance, respect, and safeguarding of one's body (Avlos, Tylka, & Wood-Barcalow, 2005)^[2]. The theoretical conceptualization of positive body image has accounts of adolescent girls and boys (Frisén & Holmqvist, 2010)^[28] and young adult women (Wood-Barcalow, Tylka, & Augustus-Horvath, 2010)^[83] identified as being highly satisfied with their appearance. Several facets of positive body image emerged from these accounts, which include holding favourable opinions of the body, respecting the body, feeling gratitude towards the body, rejecting societal ideals of attractiveness, inner positivity influencing outer demeanour, and a broad conceptualization of beauty (Tylka & Wood-Barcalow, 2015)^[77].

Body image in Adolescence

Adolescence is a transition phase, which connects childhood to adulthood. Derived from Latin language, 'adolescere' means 'growing up'. During adolescence, there is physical, emotional, social and sexual growth, enabling a child to develop into a self-regulating adult capable of caring, monitoring and guiding himself/herself, with an enormous sense of self-confidence and self-worth. This is a stage ranges from 12 to 18 years of age. During early years of this stage, girls and boys experience dramatic physical changes. However, the physical changes of this stage are of universal nature but the psychological experiences of this stage may be culture specific.

Adolescence is a stage of storms and turbulence. During adolescence many changes-biological, psychological and social take place which demands physical and psychological adjustment to accommodate the radical changes. It creates a state of confusion and discontent with their normal life. Context plays very important role in interpreting these changes in which an individual adolescent develops (Steinberg, 2010)^[66]. Under biological changes the body is transformed during adolescence, reflected in appearance and ability to conceive a child (Feldman, 2006)^[1]. Height spurt and abrupt increment in weight occurs due to increasing muscle and fat (Berk, 2004)^[3]. Girls gain more fat at a faster rate than boys (Steinberg, 1996)^[67]. Hormonal changes in this stage affects body shape- boys get widened shoulders whereas girls' hips widen disproportionately (Berk, 2004)^[3]. Despite physical changes, psychological changes appear at cognitive and emotional level. Changes are reflected at social front too. With a change in social status, individuals feel autonomy with a sense of responsibility and times is spent more with peers and maintain distance from their parents (Sawyer *et al.*, 2012)^[60].

During adolescence, body image changes to accommodate radical physical changes taking place during this stage. These accommodations are achieved by bringing desirable changes in appearance which matches with cultural standards. Studies suggest that body image changes during adolescence Blyth, Simmons, & Zakin, 1985^[4]. Tobin-Richards, Boxer, & Peterson, 1983)^[74] Adolescents' body image is fundamental to their physical health and psychological wellbeing. In this stage, adolescents are preoccupied with thoughts and feelings related to their body.

Concerns around Body Image

Body image changes over the course of life, though it seems to be fairly stable during adolescent and adult life (Tiggemann, 2004; Wertheim & Paxton, 2012) ^[73, 81]. Body image concerns are manifested in many ways, ranging from a mild preference for other's body characteristics, to pathological body image disturbances such as eating disorders or muscle dysmorphia (a pathological preoccupation with muscularity; Pope *et al.*, 2005) ^[57]. In addition, body image concerns can be about the appearance of the total body (e.g., shape, muscularity, weight, or size) or, alternatively, about specific characteristics or parts of the body (e.g., facial characteristics, hair, body parts, fitness, and strength; Wertheim & Paxton, 2012) ^[81]. A range of other body image concerns exist in girls, such as concern about facial characteristics, skin appearance, muscularity, fitness, and strength. The ideal male standard is becoming increasingly larger and more muscular; a standard difficult for most men to achieve. The ideal body for men emphasizes a "V-shape" structured by broad shoulders tapering to a thin waist with well-defined abdominal muscles (a "six pack" of abs). The desire to achieve muscle mass has been termed a drive for muscularity (McCreary & Sasse, 2000) ^[44], and has been identified as an important facet of men's body image (McCreary, Sasse, Saucier, & Dorsch, 2004) ^[45]. Men with a high drive for muscularity experience dissatisfaction with their muscle mass and see themselves as less muscular than they are objectively (McCreary & Sasse, 2000) ^[44]. In order to achieve this lean yet muscular physique, men may engage in excessive weight-lifting, body building, or steroid use (Smolak, Murnen, & Thompson, 2005) ^[65].

Peer acceptance is a main concern during this stage (Bukowski, 2003) ^[6]. Adolescents most commonly experience peer teasing and bullying related with their appearance, weight, shape, or facial features (Cash, 1995) ^[10]. Peers become influential agent in shaping adolescents' cognition about their bodies. Adolescents become aware about their physical self, body and appearance.

Body image concerns disproportionately affect women and girls over their male counterparts in many different Western societies (Ambrosi-Randic, 2000; Muth & Cash, 1997; Tatangelo & Ricciardelli, 2013) ^[1, 51, 7]. Although there are likely to be numerous societal and developmental factors contributing to this disparity, a number of commentators have suggested that Barbie dolls, which are sold in 150 countries worldwide may promote internalisation of the thin ideal in young girls.

Body dissatisfaction is a strong measure, which is a predictor of body image related concerns. Body dissatisfaction is a serious problem that is common among adolescent girls (Jones *et al.*, 2001) ^[39, 59] and is associated with a variety of risky behaviours, including early sexual activity, self-harming behaviour and suicidal planning (Cook *et al.*, 2007) ^[15]. Age, gender, and BMI are very important factors in body image.

In a society that values thinness, the ideal woman's body is decreasing at a fast pace. What once was thought of as beautiful and slender only a few decades ago is now seen as loose and flabby (Bordo, 1993) ^[5]. The continually shrinking ideal woman also has unnatural proportions. The makers of WonderBra state that a woman's proportions should be 36"-24"-36." By industry standards, this ideal

woman would be simultaneously a size four hips, size two waist, and a size 10 bust (Harrison, 2003) ^[31].

Continually being exposed to this ideal in the media, adolescent females begin to see thinness as the norm and believe it is attainable with enough effort and sacrifice (Kilbourne, 1999) ^[40]. When asked about media influence, both boys and girls said they believed that it is important to be thin in case you want to be an actress or TV host, because media business does not accept overweight hosts and actresses (Veldhuis *et al.* 2017) ^[79].

Influences of Gender, family, Peers and Media

Body image is influenced by different factors irrespective of negative or positive body image. Comments from significant others such as family, friends, peers, cliques, media, and society at large. Drawing on social psychological theories, Fredrickson and Roberts (1997) ^[27] argued that an individual's sense of self is a social construction, and that the way society and other people view and treat individuals will be reflected in the way they view and treat themselves. In a sexualized environment that promotes the objectification of women, individuals are socialized to adopt a third-person view of themselves as objects whose value is dependent on their physical appearance rather than their abilities, resulting in the internalization of narrow societal values relating to physical appearance (Morry & Staska, 2001) ^[50].

The family peers, and media exerts negative influence on appearance that leads to body image disturbances and eating pathology (Thompson, Heinberg, Altabe, & Tantleff-Dunn, 1999) ^[72]. Peers also exert strong influence on eating behaviour and body image during adolescence. Adolescent girls engage in frequent conversations about body weight/shape, physical attractiveness, and fears about becoming fat with peers (Levine & Smolak, 2004) ^[42], which have been shown to be associated with body dissatisfaction and low body-esteem among high-school girls in Japan (Yamazaki, Takamori, & Omori, 2003) ^[84].

Mass media, including television, magazines, video games, cinema, and the Internet, is a major part of the lives of millions of children, adolescents, and adults. Media is saturated with multiple, overlapping, and unhealthy messages about ideal body sizes and shapes in relation to pleasure, morality, gender, attractiveness, self-control, food, weight management, and power which often pressurizes adolescent girls to attain a thin figure by the exposure of thin media images and consequently body related concerns and eating disorders increase in them (Harrison, 2000) ^[32].

The studies suggested that time spent on the Internet, and social networking sites, is positively related with negative mood (Fardouly, Diedrichs, Vartanian, & Halliwell, 2015) ^[20] and body dissatisfaction (Fardouly & Vartanian, 2015) ^[19, 20]. Exposure to thin images of girls on media and perceived media pressure to attain a thin physique has been found to predict body concerns and eating disorder symptomatology among adolescent girls (Harrison, 2000; Paxton, Schutz, Wertheim, & Muir, 1999) ^[32, 55].

Gender impacts on appearance and body image can be observed. It is evident that internalization of thinness is linked with body dissatisfaction among adolescent girls (Nouri, Hill, & Orrell-Valente, 2011; Vartanian & Dey, 2013, Stice, 2001) ^[78, 52, 68]. Similar trend can be seen in males towards drive for muscularity which is defined as an aspiration to achieve muscular body composing mass

muscle and that leads to dissatisfaction in male and feeling themselves less muscular (McCreary & Sasse, 2000) ^[44]. A female adolescent's body image is more of a mental construct as opposed to an objective evaluation of her body (Meyers & Biocca, 1992) ^[47]. This construct defines how female adolescents think and feel about their own bodies, as well as their reactions to their body about their physical appearance (Muth & Cash, 1997; Morrison, Kalin & Morrison, 2004) ^[51, 49]. Moreover, a female adolescent's body image is very unstable and highly responsive to social cues (Meyers & Biocca, 1992) ^[47].

As far as culture is concerned, it plays vital role in body image. In western culture, the ideal female body size is represented as thin and slender, whereas the ideal male is portrayed as having well-developed muscle on the chest, arms, and shoulders with a slim waist and hips (Grogan, 1999; Ogden, 2010) ^[30]. Warren *et al.* (2005) ^[80] proposed that non-western cultures provide people with larger, more realistic and attainable physical ideals, protect people from developing a negative body image. In India, for example, the prevalence of eating disturbances are rarely reported, perhaps due to traditional Indian culture which does not encourage thinness as a symbol of feminine beauty (Dasgupta, 1998; Malhotra & Rogers, 2000) ^[17, 43]. Furthermore, non-western cultures place less value on physical appearance as a defining feature of a woman's worth, her role in society, and as an indicator of success (Buss *et al.*, 2001) ^[7]. This is in contrast to west where women's appearance has been viewed as an important feature of competitiveness, achievement, and professional success (McKinley, 1999) ^[46].

Impact of body image on everyday life

The body image is influenced by many psychological, social, cultural, and ecological factors. This changes over time and transmitted to individuals through family, peer groups, media, stories and legends. Body Image plays a vital role in people's psychological as well social life. The way body image is conceptualized, influences the self-esteem, self-conception, attitude of an individual and thus affects normal psychological developments and behaviour. Body image is found to be correlated with self-esteem, self-regard, identity, quality of life, body consciousness. Physical appearance plays vital role in the formation of body image. Physical attractiveness matters a lot, meta-analysis confirmed that attractive people are judged more positively than unattractive people (Langlois *et al.* 2000) ^[41]. Power of looks in selecting dates and mates has been found to be a determining variable (Hatfield & Sprecher, 1986) ^[36].

Exercise is an important means for weight regulation, improving tone, and generally engaging in a healthy lifestyle. Men spend a considerable amount of time exercising and weight lifting (Phillips & Drummond, 2001) ^[56], however exercise is not always related to improvements in body satisfaction (Paxton *et al.*, 1991) ^[54]. Given the female ideal is becoming increasingly toned (Butler & Ryckman, 1993) ^[8], drive for muscularity is an important facet to consider in male and female body image.

Self-esteem is the extent to which one is satisfied with themselves (Rosenberg, 1965) ^[60]. Among the domains on which self-esteem can be contingent, physical appearance is particularly important to both men and women (Harter, 1999) ^[35], and of the various components of physical appearance, body weight is considered central for women

(Fan, Liu, Wu, & Dai, 2004; Puhl & Boland, 2001; Swami, Greven, & Furnham, 2007; Tovée & Cornelissen, 2001) ^[18, 58, 70, 75]. Therefore, Clabaugh, Karpinski, and Griffin (2008) ^[14] suggest that many women disproportionately base their self-worth on this specific domain of appearance. Body weight is considered to be a particularly unhealthy self-worth domain as it is associated with low and unstable self-esteem, as well as negative body image-related consequences, including greater subjective weight, body shape anxiety, and disordered eating.

Low self-esteem has been identified as a risk factor in the body image disturbance in women (Paxton & Phythian, 1999) ^[55] and men (Green & Pritchard, 2003) ^[28]. It may also interact with other variables such as perfectionism to make an individual more vulnerable to body dissatisfaction (Cooley & Toray, 2001) ^[16]. Self-esteem contributes highly to the prediction of body satisfaction. For example, Monteath and McCabe (1997) ^[48] found that self-esteem contributed significantly to the prediction of various measures of body satisfaction, including deviation from societal ideal. Thus, self-esteem plays an important role in understanding body image.

Level of attractiveness has also been found to be a frequent comparison issue amongst adolescent girls, who report comparing their attractiveness to models and celebrities (Rikli, & Jones, 2001) ^[39, 59]. As such, it is proposed that feelings of attractiveness are a fundamental aspect for understanding an individual's experience of body image.

Conclusion

After going through the literature, it can be drawn that body image is a multifaceted concept, which is dynamic in nature. It is an ever-evolving process, which starts developing from childhood and continues throughout the life. Body image is influenced by many factors and affects various psychosocial domains in the individuals. The studies related to body image among adolescents highlight that thinness and muscularity are the desired qualities among females and males respectively. Various socializing agents like have been implicated in shaping body image among adolescents such as family, friends, peers, media and society, at large. Since early childhood, the individual exposed to society's ideals of perfect body, which creates dissatisfaction among them. To overcome the problems faced by adolescents with respect to body image, one can adapt to strategies for positive body image like spend time with people who have healthy notion of their body image, acknowledging and appreciating their appearance, and talk to experts or significant others on the concerns and issues of dissatisfaction.

References

1. Ambrosi-Randic N. Perception of current and ideal body size in preschool age children. *Perceptual and Motor Skills*. 2000; 90:885-889.
2. Avalos LC, Tylka TL, Wood-Barcalow N. The body appreciation scale: Development and psychometric evaluation. *Body Image*. 2005; 2:285-297.
3. Berk LE. *Development Through The Life Span* (3rd ed.). Boston: Allyn & Bacon, 2004.
4. Blyth DA, Simmons RG, Zakin DF. Satisfaction with body image for early adolescent females: The impact of pubertal timing within different school environments. *Journal of Youth and Adolescence*. 1985; 14:207-225.

5. Bordo S. *Unbearable weight: feminism, Western culture, and the body*. Berkeley: University of California Press, 1993.
6. Bukowski C. *Burning in water drowning in flame: selected poems* New York, 1955, 1973, 2003
7. Buss DM, Shackelford TK, Kirkpatrick LA, Larsen RJ. A half century of American mate preferences: The cultural evolution of values. *Journal of Marriage and the Family*. 2001; 63:491-503.
8. Butler JC, Ryckman RM. Perceived and ideal physiques in male and female university students. *The Journal of Social Psychology*. 1993; 133:751-752.
9. Cash TF, Smolak L. *Understanding Body Image: Historical and contemporary Perspectives*. In: T. F. Cash, & L. Smolak (Eds.), *Body Image: A Handbook of Science, Practice, and Prevention* New York: The Guilford Press, 2011, 3-11.
10. Cash TF. *What do you see when you look in the mirror? : helping yourself to a positive body image*. New York: Bantam Books, 1995.
11. Cash TF, Pruzinsky T. Future challenges for body image theory, research, and clinical practice. In T. F. Cash & T. Pruzinsky (Eds.), *Body image: A Handbook of Theory, Research, and Clinical Practice* New York: Guilford Press, 2002; 509-516.
12. Cash TF, Pruzinsky T. Future challenges for body image theory, research, and clinical practice. In *Body image. A handbook of theory, research, and clinical practice* New York, London: The Guilford Press, 2002, 509-516.
13. Cash TF, Pruzinsky T. (Eds.) *Body images: Development, deviance, and change*. New York: Guilford Press, 1990.
14. Clabaugh A, Karpinski A, Griffin K. Body weight contingency of self-worth. *Self and Identity*, 2008; 7:337-359.
15. Cook SJ, MacPherson K, Langile DB. Far from ideal: Weight perception, weight control, and associated risky behaviour of adolescent girls in Nova Scotia. *CFP MFC*, 2007; 53(4):678-684.
16. Cooley E, Toray T. Disordered eating in freshman women: A prospective study. *Journal of American College Health*. 2001; 30(1):28-36.
17. Dasgupta SD. Gender roles and cultural continuity in the Asian Indian immigrant community in the U.S. *Sex Roles: A Journal of Research*, 1998; 38(11-12):953-974.
18. Fan J, Liu F, Wu J, Dai W. Visual perception of female physical attractiveness. *Proceedings of the Royal Society of London B*. 2004; 271:347-352.
19. Fardouly J, Vartanian LR. Negative comparisons about one's appearance mediate the relationship between Face book usage and body image concerns. *Body Image*, 2015; 12:82-88.
20. Fardouly J, Diedrichs PC, Vartanian L, Halliwell E. Social comparisons on social media: The impact of Facebook on young womens body image concerns and mood. *Body Image*. 2015; 13:38-45.
21. Feldman RS. *Development across the lifespan* (4th ed.). US: Pearson, Prentice Hall, 2006.
22. Festinger L. A theory of social comparison processes. *Human Relations*, 1954; 7:117-140.
23. Fisher S, Cleveland SE. *Body image and personality*. Princeton: Van Nostrand, 1958.
24. Fisher S. The evolution of psychological concepts about the body. In T. F. Cash & T. Pruzinsky (Eds.), *Body Images: Development, Deviance, and Change* New York: Guilford Press, 1990, 3-20.
25. Fisher S, Cleveland SE. *Body image and personality* (second revised ed.). New York: Dover Publications, 1968.
26. Franklin C, Shontz. *Perceptual and cognitive aspects of body experience*. New York, Academic Press, 1969.
27. Fredrickson BL, Roberts T. Objectification theory: Toward understanding women's lived experiences and mental health risks. *Psychology of Women Quarterly*, 1997; 21:173-206.
28. Frisén A, Holmqvist K. What characterizes early adolescents with a positive body image? A qualitative investigation of Swedish girls and boys. *Body Image*, 2010; 7:205-212.
29. Green, Pritchard. Predictors of body image dissatisfaction in adult men and women, *Social Behaviour and Personality: an International Journal*. 2003; 31(3):215-222.
30. Grogan S. *Body Image: Understanding Body Dissatisfaction in Men, Women and Children*. London: Routledge, 1999.
31. Harrison PM. A "polyORFormic" analysis of prokaryote genomes using disabled-homology filtering reveals conserved but undiscovered short ORFs. *J Mol Biol*. 2003; 333(5):885-92.
32. Harrison K. The body electric: Thin ideal media and eating disorders in adolescents *Journal of Communication*, 2000; 50:119-143.
33. Harter S. Identity and self development. In S. Feldman and G. Elliott (Eds.), *At the threshold: the developing adolescent*. Cambridge, MA: Harvard University Press. 1990, 352-387.
34. Harter S. Causes, correlates and the functional role of global self-worth: A life span perspective. In R. J. Sternberg & J. Kolligan, Jr. (Eds.), *Competence considered* New Haven, CT: Yale University Press 1991, 67-97.
35. Harter S. *The construction of the self: a developmental perspective*. New York: Guilford, 1999.
36. Hatfield E, Sprecher S. *Mirror, mirror: the importance of looks in everyday life*. Albany, NY: SUNY Press, 1986.
37. Heed H. *Studies in neurology*. Oxford University Press, London, 1920, (2).
38. Heider F. *The psychology of interpersonal relations*. New York: Wiley, 1958.
39. Jones ML, Walters S, Akehurst R. The implications of contact with the mentor for pre registration nursing and midwifery students. *Journal of Advanced Nursing* 35 2001; (2):151-160.
40. Kilbourne J. *Can't buy my love*. New York, NY: Simon & Schuster, 1999.
41. Langlois JH, Kalakanis LE, Rubenstein AJ, Larson AD, Hallam MJ, Smoot MT. Maxims and myths of beauty: A meta-analytic and theoretical review. *Psychological Bulletin*, 2000; 126:390-423.
42. Levine MP, Smolak L. Body image development in adolescence. In T. F. Cash & L. Smolak (Eds.), *Body image: A handbook of theory, research, and clinical practice* NY: Guilford Press, 2004, 74-82.

43. Malhotra S, Rogers EM. Satellite Television and the New Indian Woman, *International Communication Gazette*. 2000; 62(5).
44. McCreary DR, Sasse DK. An exploration of the drive for muscularity in adolescent boys and girls. *Journal of American College Health*. 2000; 48:297-304.
45. McCreary DR, Sasse DK, Saucier DM, Dorsch KD. Measuring the drive for muscularity: Factorial validity of the Drive for Muscularity Scale in men and women. *Psychology of Men & Masculinity*. 2004; 5:49-58.
46. McKinley NM. Women and objectified body consciousness: Mothers' and daughters' body experience in cultural, developmental, and familial context. *Developmental Psychology*, 1999; 35:760-769.
47. Meyer K, Applewhite HL, Biocca FA. A survey of position trackers. *Presence: Teleoperators & Virtual Environments*, 1992; 1:173-200
48. Monteath SA, McCabe MP. The Influence of Societal Factors on Female Body Image, *The Journal of social Psychology*. 1997; 137(6):708-727.
49. Morrison TG, Kalin R, Morrison MA. Body-image evaluation and body- image investment among adolescents: A test of sociocultural and social comparison theories. *Adolescence*, 2004; 39:571-572.
50. Morry MM, Staska SL. Magazine exposure: Internalization, self-objectification, eating attitudes, and body satisfaction in male and female university students. *Canadian Journal of Behavioural Science*. 2001; 33:269-279.
51. Muth JL, Cash TF. Body-image attitudes: What difference does gender make? *Journal of Applied Social Psychology*. 1997; 27:1438-1452.
52. Nouri MLG, Hill JK, Orrell-Valente JK. Media exposure internalization of the thin ideal and body dissatisfaction: Comparing Asian American and European American college females. *Body Image* 2011; 8(4):366-372.
53. Ogden CL, Flegal KM. Changes in terminology for childhood overweight and obesity. *National health statistics reports; no 25*. Hyattsville, MD: National Center for Health Statistics, 2010.
54. Paxton SJ, Wertheim EH, Gibbons K, Szmukler GI, Hillier L, Petrovich JL. Body image satisfaction, dieting beliefs and weight loss behaviors in adolescent girls and boys. *Journal of Youth and Adolescence*. 1991; 20:361-379.
55. Paxton SJ, Schutz HK, Wertheim EH, Muir SL. Friendship clique and peer influences on body image concerns, dietary restraint, extreme weight-loss behaviors, and binge eating in adolescent girls. *Journal of Abnormal Psychology*, 1999; 108(2):255-266.
56. Philips JM, Drummond MJN. An investigation into the body image perception, body satisfaction and expectations of male fitness leaders: Implications for professional practice, *Leisure Studies*. 2001; 20(2):95-105.
57. Pope CG, Pope HG, Menard W, Fay C, Olivardia R, Philips KA. Clinical features of muscle dysmorphia among males with body dysmorphia among males with body dysmorphic disorder. *Body Image*, 2005; 2(4):395-400
58. Puhl R, Boland F. Predicting female physical attractiveness: Waist- to-hip ratio versus thinness. *Psychology, Evolution and Gender*. 2001; 3:27-46.
59. Rikli R, Jones CJ. *Senior Fitness Test Manual*. Champaign, IL: Human Kinetics, 2001.
60. Rosenberg M. *Society and the adolescent self-image*. Princeton, NJ: Princeton University Press, 1965.
61. Sawyer SM. *Adolescence: A Foundation for Future Health*. *The Lancet*, 2012; 379(9826):1630-40.
62. Schilder P. *The image and appearance of the human body*. New York: International Universities Press, 1935-1950.
63. Shafran R, Fairburn CG, Robinson P, Lask B. Body checking and its avoidance in eating disorders. *International Journal of Eating Disorders*. 2004; 35:93-101.
64. Shontz FC. Body image and physical disability. In T. F. Cash & T. Pruzinsky (Eds.), *Body images: Development, deviance, and change* New York: Guilford Press, 1990, 149-169.
65. Smolak L, Murnen SK, Thompson JK. Sociocultural influences and muscle building in adolescent boys. *Psychology of Men and Masculinity*, 2005; 6:227-239.
66. Steinberg L. Commentary: A behavioral scientist looks at the science of adolescent brain development. *Brain and Cognition*. 2010; 72:160-164.
67. Steinberg L, Cauffman E. Maturity of judgment in adolescence: Psychosocial factors in adolescent decision making. *Law and Human Behaviour*, 1996; 20:249-272.
68. Stice E. A prospective test of the dual-pathway model of bulimic pathology: Mediating effects of dieting and negative effect. *Journal of Abnormal Psychology*, 2001; 110:124-135.
69. Swami V, Airs N, Chouhan B, Leon MAP, Towell T. Are there ethnic differences in positive body image among female British undergraduates? *European Psychologist*. 2009; 14:288-296.
70. Swami V, Greven C, Furnham A. More than just skin deep? A pilot study integrating physical and non-physical factors in the perception of physical attractiveness. *Personality and Individual Differences*, 2007; 42:563-572.
71. Tatangelo GL, Ricciardelli LA. A qualitative study of preadolescent boys' and girls' body image: Gendered ideals and sociocultural influences. *Body Image*. 2013; 10(4):591-598.
72. Thompson JK, Heinberg LJ, Altabe M, Tantleff-Dunn, S. *Exacting beauty. Theory, assessment, and treatment of body image disturbance*. Washington DC: American Psychological Association, 1999.
73. Tiggemann M. Body image across the adult life span: Stability and change. *Body Image*, 2004; 1:29-41.
74. Tobin-Richards MH, Boxer AM, Petersen AC. The psychological significance of pubertal change: Sex differences in perceptions of self during early adolescence. In J. Brooks-Gunn & A. C. Petersen (Eds.), *Girls at puberty: Biological and psychosocial perspectives*, New York: Plenum, 1983, 127-154.
75. Tovée MJ, Cornelissen PL. Female and male perceptions of female physical attractiveness in front-view and profile. *British Journal of Psychology*, 2001; 92:391-402.
76. Tylka TL. Positive psychology perspectives on body image. In T. F. Cash & L. Smolak (Eds.), *Body image: A handbook of science, practice, and prevention* (2nd ed.,). New York: Guilford Press, 2011, 56-64.

77. Tylka TL, Wood-Barcalow NL. What is and what is not positive body image? Conceptual foundations and construct definition. *Body Image*. 2015; 14:118-129.
78. Vartanian LR, Dey S. Self-concept clarity, thin-ideal internalization, and appearance-related social comparison as predictors of body dissatisfaction. *Body Image*, 2013; 10:495-500.
79. Veldhuis J, Poel FT, Pepping R, Konijn EA, Spekman MLC. "Skinny is prettier and normal: I want to be normal"-Perceived body image of non-Western ethnic minority children in the Netherlands. *Body Image* 2017; (20):74-86.
80. Warren BH, Bermingham E, Prys-Jones RP, Thebaud C. Tracking island colonization history and phenotypic shifts in Indian Ocean bulbuls. *Biological Journal of the Linnean Society*. 2005; 85:271-287.
81. Wertheim EH, Paxton SJ. Body image development – adolescent girls. In T. F. Cash (Ed.), *Encyclopedia of body image and human appearance* London, UK: Academic Press, 2012, 187-193.
82. Williamson DA, Gleaves DH, Watkins PK, Schlundt, DG. Validation of self-ideal body size discrepancy as a measure of body dissatisfaction. *Journal of Psychopathology and Behavioral Assessment*. 1993; 15:57-68.
83. Wood-Barcalow NL, Tylka TL, Augustus-Horvath CL. But I like my body: Positive body image characteristics and a holistic model for young-adult women. *Body Image*. 2010; 7:106-116.
84. Yamashita T. Enhanced insulin sensitivity in mice lacking ganglioside GM3. *Proceedings of the National Academy of Sciences of the U. S. A.* 2003; (100):3445-3449.