

## How a Mother's Perception of Body Image Affects Her Child

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### Abstract:

The connection between body image, self-concept, and the parent/child relationship has been evident among adolescents and their parents for some time; however, little data are available on the association between body image, self-concept, and the parent/child relationship with younger children. The present study explored how a mother's perception of her body image affected her child's perception of his or her own body image. This research study explored the self-reporting of 54 mothers and 54 boys and girls ages 7 to 10 regarding how they perceived their body image, self-concept, and the parent/child relationship. Results indicated that mothers influence their children's body image and self-concept. A correlation analysis suggested that body image is related to several factors, such as self-concept, physical attractiveness, moral self-concept, personal self-concept, family relationships, social self-concept, a person's academic achievement, as well as parental support, a mother's parental satisfaction, mother/child interaction, boundary setting, independence, level of responsibility, and social desirability. These findings, along with the results of the Tennessee Self-Concept Scale-2 (TSCS-2) (Fitts & Warren, 2003), the Parent-Child Relationship Inventory (PCRI) (Gerard, 2005), the Parent Report Card (PRC) (Berg-Cross, 1997) for children, and the Body Image Assessment (BIA) (Collins, 1991), suggest that the management of body image concerns in young children should be addressed even at a young age. Findings suggest that a significant connection exists between the body image concerns of a mother and those of a child. Intervening measures, especially those aimed at the prevention of body image disturbances, have the potential to influence and prevent undesirable consequences relative to body image.

body image, self-concept, Body Mass Index (BMI), Body Image Assessment (BIA)

Over the past decade, the multi-dimensional constructs of body image and self-concept have become leading concerns for children and adults alike (Skemp-Arlt, Rees, Mikat, & Seebach, 2006). Examples of the dimensions related to body image include body image satisfaction, body image perception, self-concept, cognitive development, behavioral development, and psychological consequences. Body image perception has a direct bearing on the way a person feels about him or herself (Sloan, 2010). This perception can vary greatly from reality, resulting in a body image that is either larger or smaller than reality and associated with risk behaviors that have the potential to contribute to morbidity and mortality in children (Riesch, Anderson, & Krueger, 2006). Parents often exert significant influence over body image and self-concept in young children (Al Sabbah et al., 2009). Numerous studies have examined factors associated with body image dissatisfaction, self-concept, and weight status (DeFrank, Mehta, Stein, & Baker, 2007; Giles & Hass, 2008; Ogden et al., 2006); however, few studies (Al Sabbah et al., 2009; Riesch et al., 2006) examined the relationship between a parent's perception of body image and a child's perception of body image. The role of the parent in the development of body image in young children begins at birth and continues into the adolescent years (Oswalt, 2008).

The interface between parent and child and their surroundings is evident during each of the child developmental stages (Bronfenbrenner, 1979). Erikson (1950) noted that not only does a parent influence a child's development; but a child also influences the parent's development. *Mutuality* was a term coined by Erikson to describe the interface between these two generations.

Erikson's stages of development provide a framework in which the child becomes more aware of the self in relationship to his or her parents, while parents become more aware of their role in the development of body image perception in their children.

A recent study by Hernandez, Cheng, and Serwint (2010) revealed that 64% of parents misperceived their children's body image when using a silhouette scale to identify their children's body image. The fact that

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a parent can misperceive a child's body image is an indicator that parents' perceptions can be influenced by personal beliefs and misperceptions about their own weight status and body image (Hernandez et al., 2010). Grogan (2008) and Goldfield, Blouin, and Woodside (2006) established that both males and females have the capacity to exhibit the same levels of body image distortion. It is not inconceivable to find that men can be just as dissatisfied as women can when evaluating their own body image. This body image perception in adults often influences children and their self-perceptions.

According to Natenshon (2009), the most influential messages a child receives in reference to body image and self-concept come not from the media, but from what he or she learns in the home environment from his or her parents. When children as young as 5-years-old are taught to value themselves and to contribute to society, they begin to develop healthy habits and positive attitudes (Natenshon, 2009). Parents who sustain a healthy body image act as role models for the promotion of self-concept and body satisfaction for their children. Encouraging open communication between parents and children can reduce the potential for developing issues related to self-concept and body image problems (Natenshon, 2009). By encouraging the adoption of a healthy outlook and positive self-concept, the child/parent relationship can add substantially to the development of a positive body image.

Currently, a large gap exists between what society considers to be the standard for socially acceptable body types and the actual body types of young children, adolescents, and adults (Skemp-Arlt, 2006). Unrealistic expectations, such as those evident in 50% of all magazine ads and 56% of television ads, confirm media pressures to attain the perfect body image (Natenshon, 2009). These expectations, accompanied by increased weight and body size in the general population, have exacerbated the development of body image problems in preadolescent and adolescent children (Skemp-Arlt, 2006). Body image dissatisfaction often results in poor dietary habits, restrictive dieting, and even the development of eating disorders (Phillips & deMan, 2010). Costs associated with poor body image perception result in an emotional, psychological, and monetary drain on the health status of children. At a time when children should be focused on their development and personal growth, many young boys and girls are becoming consumed and emotionally drained due to poor body image dissatisfaction, poor self-concept, and a lack of positive parent/child relations (Kater, 2011).

## **METHOD**

This research study employed a quantitative method with a correlational design to explore the concept of body image from a parental and child's perspective. A quantitative study with a correlational design is practical when determining the relationship between two or more variables to determine whether they influence each other (Creswell, 2008). A correlational design was chosen over other methods because this design enabled the researcher to predict outcomes. This research study included a comparison of the variables to determine whether the difference or lack thereof in a child's perception of body image was related to his or her mother's self-perception of her body image. Quantification of the variables established the grounds for an objective comparison of this type of evaluation (Creswell, 2008).

Bronfenbrenner's (1979) theoretical framework of ecological development and Rosenstock's Health Belief Model (1974) promotes the concept of relationships between children, parents, schools, communities, and the global environment. This theoretical framework was supportive of the purpose of this research study, which was to explore whether there was a relationship between a mother's perception of her own body image and her child's perception of body image. A description of the relationship between the dependent and independent variables within the research problem establishes the basis for the theoretical framework (Creswell, 2008; Macnee & McCabe, 2008).

A comparison of the mothers' scores on the TSCS-2 (Fitts & Warren, 2003), BIA (Collins, 1991), and the PCRI (Gerard, 2005) to their children's scores on the TSCS-2 (Fitts & Warren, 2003), BIA (Collins, 1991), and PCR (Berg-Cross, 1997) were completed.

The resulting analysis of the Collins Body Image Assessment (BIA) (Collins, 1991) has revealed a direct relationship or correlation between a mother's body image and a child's body image. The BIA (Collins, 1991) was used to survey 108 participants. 54 were mothers between the ages of 24 and 64, and 54 were

children (boys and girls) between the ages of 7 and 10. Table 5 presents the descriptive statistics for the sample population. The mean age for participants in this study was 24.33 with a standard deviation of 16.446, with the youngest participant being 7 and the oldest at 64 years of age. The mean height was 57.84, with a standard deviation of 7.963. Body weight averaged between 45lbs. and 269lbs. with a mean of 120.88. Body Mass Index (BMI) was computed using the Center for Disease Control's BMI calculator. BMI ranged between 13.3 and 61.2, with a mean BMI of 24.819 and a standard deviation of 8.2559. The mean score for perceived body image was 4.28 with a standard deviation of 1.151, indicating that the participants perceived themselves to be of normal weight choosing the center figure of the 7 available figures. The desired body image mean score was 3.27 out of 7, with a standard deviation of .816. In almost all cases, participants chose thinner figures as their desired body image as evident with a mean score of 3.27 rather than the average figure with a score of 4.

A correlational analysis of the Body Image Assessment (Collins, 1991) for mothers and children was critical in identifying how relevant factors such as perceived self-image, desired self-image, and conforming to societal expectations and ideals have the potential to shape the self-perception of body image in mothers and their children. A Pearson product-moment correlation was completed for combined mother/child scores to determine the relationship between a mother's perception of her body image and her child's perception of his or her own body image (see Table 6). While most of the participants perceived themselves as being average with a mean score of 4.28 and a standard deviation of 1.151 the majority of the participants desired to be thinner than average with a mean score of 3.27 and standard deviation of .816. The results of the BIA (Collins, 1991) revealed significant correlations between several of the subscales of the body image assessment. The five most significant correlations include weight and age with  $r = .772$ ,  $n = 108$ , and  $p = .000$ . This score was followed by age and height with  $r = .729$ ,  $n = 108$ , and a significance of  $p = .000$ . The subsequent most significant correlations included weight and height at  $r = .698$ ,  $n = 108$ , and  $p = .000$ . and weight and body mass index at  $r = .644$ ,  $n = 108$ , and  $p = .000$ . Perceived body image and body mass index also correlated positively at  $r = .492$  with a significance level of  $.000$  as well as desired body image and perceived body image which correlated positively at  $r = .487$  with a significance level of  $.000$ . A Pearson product-moment correlation indicated that factors such as age, weight, height, perceived body image and desired body image all affect a mother and child's mental perception of themselves both consciously and unconsciously.

An additional correlation analysis compared the children's scores on the Body Image Assessment (Collins, 1991) to their mother's scores (see Table 7). There was a significant correlation between the two subscales of perceived body image and desired body image for children. The results for perceived body image in children and ChBMI showed

Table 7  
*Correlational Analysis of Body Image in Children and their Mothers*

		ChBMI	ChPerceived	ChDesired	ChDifference	ParBMI	ParPerceived	ParDesired	ParDifference
ChBMI	Pearson Correlation	1	.585**	.329*	-.441**	.065	.208	.088	-.187
	Sig. (two-tailed)		.000	.015	.001	.639	.132	.528	.176
	N	54	54	54	54	54	54	54	54
ChPerceived	Pearson Correlation	.585**	1	.584**	-.737**	.007	.105	.084	-.076
	Sig. (two-tailed)	.000		.000	.000	.957	.450	.544	.587
	N	54	54	54	54	54	54	54	54
ChDesired	Pearson Correlation	.329*	.584**	1	.118	-.024	.142	.263	.030
	Sig. (two-tailed)	.015	.000		.394	.863	.305	.054	.830
	N	54	54	54	54	54	54	54	54
ChDifference	Pearson Correlation	-.441**	-.737**	.118	1	-.029	-.010	.116	.117
	Sig. (two-tailed)	.001	.000	.394		.834	.942	.405	.399
	N	54	54	54	54	54	54	54	54
ParBMI	Pearson Correlation	.065	.007	-.024	-.029	1	.258	.369**	.045
	Sig. (two-tailed)	.639	.957	.863	.834		.060	.006	.747
	N	54	54	54	54	54	54	54	54
ParPerceived	Pearson Correlation	.208	.105	.142	-.010	.258	1	.634**	-.670**
	Sig. (two-tailed)	.132	.450	.305	.942	.060		.000	.000
	N	54	54	54	54	54	54	54	54
ParDesired	Pearson Correlation	.088	.084	.263	.116	.369**	.634**	1	.124
	Sig. (two-tailed)	.528	.544	.054	.405	.006	.000		.371
	N	54	54	54	54	54	54	54	54
ParDifference	Pearson Correlation	-.187	-.076	.030	.117	.045	-.670**	.124	1
	Sig. (two-tailed)	.176	.587	.830	.399	.747	.000	.371	
	N	54	54	54	54	54	54	54	54

\*\* . Correlation is significant at the 0.01 level (two-tailed).

\* . Correlation is significant at the 0.05 level (two-tailed).

Ch = Children

Par = Mothers

a significant correlation at the 0.01 (two-tailed) level with  $r = 0.585$ ,  $n = 54$ ,  $p = .000$ . Children's desired body image also correlated positively at the 0.05 (two-tailed) level with BMI in children resulting in  $p = .329$ ,  $n = 54$ ,  $p = .015$  (see Table 6). There was also a strong negative correlation between the difference between the children's desired body image and the perceived body image in children,  $r = -.737$ ,  $n = 54$ ,  $p = .000$ , signifying that the children often overestimated their actual BMI even though they were of average size (see Table 6).

The mothers' scores also demonstrated a significant, positive correlation between BMI and perceived and desired body image. The results for BMI showed a significant correlation at  $r = .369$ ,  $n = 54$ , and  $p = .006$ . Scores for perceived body image also correlated significantly at  $r = .634$ ,  $n = 54$ ,  $p = .000$ . Desired body image in mothers also correlated positively at  $r = .369$ ,  $n = 54$ ,  $p = .006$ . A Pearson product-moment correlation coefficient summarized the results (see Table 6). Overall, there was a strong positive correlation between perceived body image, desired body image, and body mass index (BMI) in children and their mothers.

Children's perceived body image, desired body image, and BMI scores have been observed as being strongly correlated to perceived and desired body image and BMI scores in mothers. Perceived and desired body image have been found to be strongly correlated with issues related to attractiveness, weight, and fitness in both children and their mothers (Spiller, 2009). A strong correlation between the scores of mothers and children supports the fact that body image concerns are related to numerous factors such as body dissatisfaction, the desire to be thin, parent/child relationships, self-concept, and maternal and sibling influence (Spiller, 2009). One of the most critical scores on the TSCS-2 (Fitts & Warren, 2003) is total self-concept. The individual scores for total self-concept provide a good assessment of how each individual views him or herself in relationship to mothers and fathers, children, families,

Table 6

*Correlations for Combined Body Image for Mothers and Children*

		Age	Weight	Height	BMI	Perceived	Desired	Difference
Age	Pearson Correlation	1	.772**	.729**	.291**	.229**	-.274**	-.475**
	Sig. (two-tailed)		.000	.000	.002	.017	.004	.000
	N	108	108	108	108	108	108	108
Weight	Pearson Correlation	.772**	1	.698**	.644**	.479**	-.076**	-.587**
	Sig. (two-tailed)	.000		.000	.000	.000	.436	.000
	N	108	108	108	108	108	108	108
Height	Pearson Correlation	.729**	.698**	1	-.032	.168	-.313**	-.441**
	Sig. (two-tailed)	.015	.000		.742	.082	.001	.305
	N	108	108	108	108	108	108	108
BMI	Pearson Correlation	-.291**	-.644**	-.032	1	.492**	-.206**	-.372**
	Sig. (two-tailed)	.002	.000	.742		.000	.032	.000
	N	108	108	108	108	108	108	108
Perceived	Pearson Correlation	.229*	.479**	-.168	.492**	1	.487**	-.710**
	Sig. (two-tailed)	.017	.000	.082	.000		.000	.000
	N	108	108	108	108	108	108	108
Desired	Pearson Correlation	-.274**	.076	-.313**	.206	.487**	1	.259**
	Sig. (two-tailed)	.004	.436	.001	.032	.000		.007
	N	108	108	108	108	108	108	108
Difference	Pearson Correlation	-.475**	-.587**	-.441**	-.372**	-.710**	.259**	1
	Sig. (two-tailed)	.000	.000	.000	.000	.000	.007	
	N	108	108	108	108	108	108	108

\*\* Correlation is significant at the 0.01 level (2-Tailed)

\*Correlation is significant at the 0.05

and other individuals who play a vital role in the individual's personal development. In addition to examining the data sets for mothers and their children individually, the means and standard deviations for the subscale scores were examined for children and their mothers. The subscale means for mothers, and their children were positively skewed. The mean score for children of 56.19 with a standard deviation of 8.759 indicated that they had a positive self-concept view in which their definition of the self was positively associated with a strong sense of self-worth. These children can recover quickly from any threats directed at their view of themselves. These children are very likely to possess an accurate representation of their strengths and weaknesses relative to their self-concept.

The mean score for total self-concept in mothers was 50.09 (see Table 9). The mothers' self-concept scores rank at the low end of the mid-range for self-concept. While the mothers viewed their self-concept positively, they viewed their bodies, health status, appearance, abilities, and sexual state more harshly than their children. These mothers will most likely use the information about their appearances to build a more positive sense of self-esteem and self-image in their children, which is why the children's scores were in the upper end of the 40T to 60T range. (see Table 8). The mothers seem to have set realistic expectations for their children about their physical appearances and how their bodies function.

A Pearson product-moment correlation analysis was computed for the seven subscales of the TSCS-2 (Fitts & Warren, 2003). This analysis resulted in significant correlations on six subscale scores and positive correlations for the three supplementary scores, identity, satisfaction, and behavior, for both mothers and their children (See Table 10). The null hypothesis ( $H_{2_0}$ ) was rejected in favor of the alternative hypothesis ( $H_{2_a}$ ) as the results of the Tennessee Self Concept Scale 2 revealed that a significant correlation existed between a mother's and child's self-concept.

Table 10  
TSCS-2 Scores for Children

		Total Concept	Self Conflict	Physical	Moral	Personal	Family	Social	Academic	Identity	Satisfaction	Behavior
Total Self Concept	Pearson	1	-.198	.805**	.701**	.737**	.752**	.810**	.668**	.873**	.900**	.905**
	Correlation											
	Sig. (two-tailed)		.151	.000	.000	.000	.000	.000	.000	.000	.000	.000
Conflict	N	54	54	54	54	54	54	54	54	54	54	54
	Pearson	-.198	1	-.295*	-.138	-.121	.007	-.154	.027	-.097	-.210	-.215
	Correlation											
Physical	Sig. (two-tailed)	.151		.030	.321	.382	.959	.266	.846	.483	.128	.118
	N	54	54	54	54	54	54	54	54	54	54	54
	Pearson	.805**	-.295*	1	.445**	.530**	.511**	.543**	.539**	.736**	.703**	.726**
Moral	Correlation											
	Sig. (two-tailed)	.000	.030		.001	.000	.000	.000	.000	.000	.000	.000
	N	54	54	54	54	54	54	54	54	54	54	54
Personal	Pearson	.701**	-.138	.445**	1	.383**	.484**	.617**	.208	.685**	.770**	.600**
	Correlation											
	Sig. (two-tailed)	.000	.321	.001		.004	.000	.000	.132	.000	.000	.000
Family	N	54	54	54	54	54	54	54	54	54	54	54
	Pearson	.737**	-.121	.530**	.383**	1	.690**	.516**	.618**	.624**	.710**	.724**
	Correlation											
Social	Sig. (two-tailed)	.000	.382	.000	.004		.000	.000	.000	.000	.000	.000
	N	54	54	54	54	54	54	54	54	54	54	54
	Pearson	.752**	.007	.511**	.484**	.690**	1	.611**	.480**	.722**	.785**	.728**
Academic	Correlation											
	Sig. (two-tailed)	.000	.959	.000	.000	.000		.000	.000	.000	.000	.000
	N	54	54	54	54	54	54	54	54	54	54	54
Behavior	Pearson	.810**	-.154	.543**	.617**	.516**	.611**	1	.365**	.778**	.761**	.762**
	Correlation											
	Sig. (two-tailed)	.000	.266	.000	.000	.000	.000		.007	.000	.000	.000
Total Self Concept	N	54	54	54	54	54	54	54	54	54	54	54
	Pearson	.668**	.027	.539**	.208	.618**	.480**	.365**	1	.468**	.493**	.577**
	Correlation											
Total Self Concept	Sig. (two-tailed)	.000	.846	.000	.132	.000	.000	.007		.000	.000	.000



	N	54	54	54	54	54	54	54	54	54	54	54
Identity	Pearson	.873**	-.097	.736**	.685**	.624**	.722**	.778**	.468**	1	.795**	.684**
	Correlation											
	Sig. (two-tailed)	.000	.483	.000	.000	.000	.000	.000	.000		.000	.000
	N	54	54	54	54	54	54	54	54	54	54	54
Satisfaction	Pearson	.900**	-.210	.703**	.770**	.710**	.785**	.761**	.493**	.795**	1	.826**
	Correlation											
	Sig. (two-tailed)	.000	.128	.000	.000	.000	.000	.000	.000	.000		.000
	N	54	54	54	54	54	54	54	54	54	54	54
Behavior	Pearson	.905**	-.215	.726**	.600**	.724**	.728**	.762**	.577**	.684**	.826**	1
	Correlation											
	Sig. (two-tailed)	.000	.118	.000	.000	.000	.000	.000	.000	.000	.000	
	N	54	54	54	54	54	54	54	54	54	54	54

\*\* . Correlation is significant at the 0.01 level (two-tailed).

\* . Correlation is significant at t

A Pearson product-moment correlation coefficient was completed to determine the relationship between children's self-concept and their mothers' self-concept and the relationship between self-concept and human behavioral characteristics in mothers and their children. The results of the TSCS-2 (Fitts & Warren, 2003) for children revealed that a significant correlation existed among the six of the seven subscales of the TSCS-2 (Fitts & Warren, 2003) at the 0.01 (two-tailed) levels as well as in the three summary scores of identity, satisfaction, and behavior. These subscales all showed a significant correlation at the 0.01 level (two-tailed) (see Table 10). The score for physical self-concept in children was significant at  $r = .805$ ,  $n = 54$ ,  $p = .000$ ; moral self-concept demonstrated a significant correlation at  $r = .701$ ,  $n = 54$ ,  $p = .000$ ; and perceived self-concept was significant at  $r = .737$ ,  $n = 54$ ,  $p = .000$ . Family self-concept correlated significantly in children at  $r = .752$ ,  $n = 54$ ,  $p = .000$ ; social self-concept showed a significant correlation at  $r = .810$ ,  $n = 54$ ,  $p = .000$ ; and academic self-concept demonstrated a significant correlation at  $r = .668$ ,  $n = 54$ ,  $p = .000$ .

The single most important score on the TSCS-2 (Fitts & Warren, 2003) is the total self-concept score. The mean total self-concept score for children was 56.19, with a standard deviation of 8.759 (see Table 8). The mean score indicated that the children had a positive self-concept view in which their definition of the self was positively associated with a strong sense of self-worth. These children can recover quickly from any threats directed at their view of themselves.

These children are very likely to possess an accurate representation of their strengths and weaknesses relative to their self-concept. The scores on the TSCS-2 (Fitts & Warren, 2003) for the children indicated that they often sought support and positive feedback from their mothers that assisted them in attaining their goals and enhancing their self-concept. A strong self-concept score indicates that children are more resilient and often persistently overcome personal setbacks that affect their self-concept. The results of the TSCS-2 (Fitts & Warren, 2003) for children revealed that a significant correlation existed among six of the seven subscales of the TSCS-2 (Fitts & Warren, 2003) at the 0.01 (two-tailed) level as well as in the identity scores, which showed a significant correlation at the 0.01 level (two-tailed). The score for physical self-concept was significant at  $r = .805$ ,  $n = 54$ ,  $p = .000$ ; moral self-concept demonstrated a significant correlation at  $r = .701$ ,  $n = 54$ ,  $p = .000$ ; and perceived self-concept was significant at  $r = .737$ ,  $n = 54$ ,  $p = .000$  (see Table 10). Family self-concept correlated significantly at  $r = .752$ ,  $n = 54$ ,  $p = .000$ . Social self-concept showed a significant correlation at  $r = .810$ ,  $n = 54$ ,  $p = .000$ , whereas academic self-concept demonstrated a significant correlation at  $r = .668$ ,  $n = 54$ ,  $p = .000$  (see Table 9).

The mean total self-concept score for mothers was 50.09, with a standard deviation of 10.474 (see Table 9). While the mothers scored in the mid-range on self-concept, their scores were lower than their children's. Mothers' scores indicated that they had a good sense of self-worth and could accurately assess their strengths and weaknesses. Mothers were more likely to seek support from spouses and family members to enhance their self-worth and self-concept. A significantly strong correlation in moral, personal, family, and social self-concept indicates that these areas are essential contributors to mothers' overall development of self-concept levels.

The results of the TSCS-2 (Fitts & Warren, 2003) for mothers revealed that a significant correlation existed among six of the seven subscales at the 0.01 (two-tailed) level as well as in the identity scores, which showed a significant correlation at the 0.01 level (two-tailed). A significant correlation existed for physical self-concept with an  $r = .777$ ,  $n = 54$ ,  $p = .000$  (see Table 11). This indicates that mothers viewed their physical self, appearance, well-being, skillfulness, and sexual state of being in a positive light. The mothers' trepidation about their own appearance directly influenced their children's appearance, health, and well-being. This concern effectively enhanced the self-concept of their children in a positive way.

The moral self-concept of mothers also correlated positively at  $r = .829$ ,  $n = 54$ ,  $p = .000$ . Moral self-concept defines the mothers' degree of satisfaction with their moral behavior and personal view of themselves. The participants in this study viewed themselves with some degree of flexibility revolving around their conduct. The mothers and children tended to be more forgiving of their conduct and others.

A Pearson product correlation coefficient for personal self-concept also demonstrated a substantial correlation in the area of personal self-concept with  $r = .942$ ,  $n = 54$ ,  $p = .000$ .

This score indicates mothers with a positive sense of self-concept, including a sense of adequacy and a strong sense of personal self-worth reflective of an upbeat personality aside from their physical body characteristics. Personal self-concept reflects a mother's personality and is evident in her relationship with her children. Mothers used their self-concept and sense of self-worth and their feelings of adequacy to positively influence their children, which is evident in the scores of children with a mean of 53.98, whereas the mothers' mean score totaled 51.19 indicating that mothers had a positive influence on the personal self-concept of their children.

A Pearson product-moment correlation for higher for mothers at  $r = .871$ ,  $n = 54$ , and  $p = .000$  (see Table 11). Family self-concept reflects how the children and mothers see their adequacy as a person, their self-worth, and their value as a family member. Family self-concept also reflects how children relate to their peers and teachers and their relationships with others. Children who fall into the mid-range in family self-concept (i.e., scores from 40 to 60) often express their sense of satisfaction with the support and nurturing they receive from their mothers and family. Children and mothers whose scores ranged from 40 to 60 often express intense satisfaction with their relationships with other family members.

Social self-concept measures how well people perceive themselves with others in their environment. Scores for social self-concept were computed using a Pearson product-moment correlation. Children scored in the mid-range with scores that were significant at  $r = .810$ ,  $n = 54$ ,  $p = .000$  (see Table 10), whereas mothers scored with a significance of  $r = .821$ ,  $n = 54$ ,  $p = .000$  (see Table 11). The social self-concept scores in this study can be categorized in the normal or mid-range for mothers and children. Social self-concept indicates that mothers and children often feel a sense of adequacy in their interactions with their peers and other family members. In mothers, the social self-concept reflects their social interactions with others. In young children, the social self-concept reflects the degree to which they can rely on their friends and family.

The supplementary scores of the TSCS-2 (Fitts & Warren, 2003) for identity, satisfaction, and behavior correlated significantly for both children and mothers. The supplementary scores explain a participant's identity, level of satisfaction with the self-concept, and behavioral characteristics. A Pearson product-moment correlation coefficient was significant in children for identity at  $r = .873$ ,  $n = 54$ ,  $p = .000$  (see Table 10). Satisfaction correlated significantly in children with  $r = .900$ ,  $n = 54$ , and  $p = .000$  (see Table 10). Scores for behavior also correlated significantly in children with  $r = .905$ ,  $n = 54$ , and  $p = .000$  (see Table 10). A Pearson product-moment correlation coefficient was significant in mothers for identity at  $r = .778$ ,  $n = 54$ ,  $p = .000$  (see Table 11). Satisfaction also correlated positively in mothers with  $r = .824$ ,  $n = 54$ , and  $p = .000$  (see Table 11). Behavior scores also correlated positively with  $r = .806$ ,  $n = 54$ , and  $p = .000$  (see Table 11). The supplementary scores of the TSCS-2 (Fitts & Warren, 2003) are often compared

Table 11  
*TSCS-2 Scores for Mothers*

		Total Self-concept	Conflict	Physical	Moral	Personal	Family	Social	Academic	Identity	Satisfaction	Behavior
Total Self-concept	Pearson Correlation	1	.108	.777**	.829**	.942**	.871**	.821**	.686**	.778**	.824**	.806**
	Sig. (two-tailed)		.437	.000	.000	.000	.000	.000	.000	.000	.000	.000
	N	54	54	54	54	54	54	54	54	54	54	54
Conflict	Pearson Correlation	.108	1	.031	.180	.156	.033	.078	.024	.190	.158	.085
	Sig. (two-tailed)	.437		.826	.194	.258	.811	.577	.861	.170	.252	.540
	N	54	54	54	54	54	54	54	54	54	54	54
Physical	Pearson Correlation	.777**	.031	1	.553**	.711**	.677**	.524**	.426**	.758**	.625**	.627**
	Sig. (two-tailed)	.000	.826		.000	.000	.000	.000	.001	.000	.000	.000
	N	54	54	54	54	54	54	54	54	54	54	54
Moral	Pearson Correlation	.829**	.180	.553**	1	.728**	.754**	.602**	.520**	.613**	.683**	.747**
	Sig. (two-tailed)	.000	.194	.000		.000	.000	.000	.000	.000	.000	.000
	N	54	54	54	54	54	54	54	54	54	54	54
Personal	Pearson Correlation	.942**	.156	.711**	.728**	1	.802**	.771**	.629**	.764**	.782**	.718**
	Sig. (two-tailed)	.000	.258	.000	.000		.000	.000	.000	.000	.000	.000
	N	54	54	54	54	54	54	54	54	54	54	54
Family	Pearson Correlation	.871**	.033	.677**	.754**	.802**	1	.703**	.404**	.716**	.741**	.777**
	Sig. (two-tailed)	.000	.811	.000	.000	.000		.000	.002	.000	.000	.000
	N	54	54	54	54	54	54	54	54	54	54	54
Social	Pearson Correlation	.821**	.078	.524**	.602**	.771**	.703**	1	.420**	.644**	.712**	.676**
	Sig. (two-tailed)	.000	.577	.000	.000	.000	.000		.002	.000	.000	.000
	N	54	54	54	54	54	54	54	54	54	54	54
Academic	Pearson Correlation	.686**	.024	.426**	.520**	.629**	.404**	.420**	1	.339*	.468**	.435**
	Sig. (two-tailed)	.000	.861	.001	.000	.000	.002	.002		.012	.000	.001
	N	54	54	54	54	54	54	54	54	54	54	54
Identity	Pearson Correlation	.778**	.190	.758**	.613**	.764**	.716**	.644**	.339*	1	.746**	.815**
	Sig. (two-tailed)	.000	.170	.000	.000	.000	.000	.000	.012		.000	.000
	N	54	54	54	54	54	54	54	54	54	54	54
Satisfaction	Pearson Correlation	.824**	.158	.625**	.683**	.782**	.741**	.712**	.468**	.746**	1	.838**
	Sig. (two-tailed)	.000	.252	.000	.000	.000	.000	.000	.000	.000		.000
	N	54	54	54	54	54	54	54	54	54	54	54
Behavior	Pearson Correlation	.806**	.085	.627**	.747**	.718**	.777**	.676**	.435**	.815**	.838**	1
	Sig. (two-tailed)	.000	.540	.000	.000	.000	.000	.000	.001	.000	.000	
	N	54	54	54	54	54	54	54	54	54	54	54

\*\* . Correlation is significant at the 0.01 level (two-tailed).

\* . Correlation is significant at the 0.05 level (two-tailed)

with each other when interpreting the seven subscales of the TSCS-2 (Fitts & Warren, 2003), providing additional insight into how individuals interpret their self-concept. This analysis displayed significant findings in six of the seven subscales. The subscale with the most significant ranking was the social self-concept subscale, with a significance level of  $r = .810$ , significance (two-tailed)  $.000$ , and  $n = 54$ . Physical self-concept scored a positive correlation at  $r = .805$ , significance (two-tailed),  $n = 54$ . The subscale with the most negligible effect on self-concept was conflict, with  $r = -.198$ , significance (two-tailed)  $.151$ , and  $n = 54$ . Other subscales that tested significantly using the Pearson product-moment correlation for self-concept include moral, personal, family, and academic. Moral self-concept correlated positively in children with a score of  $r = .701$ ,  $n = 54$ ,  $p = .000$ . In contrast, personal self-concept ranked significantly positive with a score of  $r = .737$ ,  $n = 54$ ,  $p = .000$ . In contrast, family self-concept demonstrated a positive correlation among other children in the study with an  $r = .752$ ,  $n = 54$ , and  $p = .000$  level of significance. The last subscale under self-concept included academic self-concept, which also showed a positive correlation in children at  $r = .668$ ,  $n = 54$ ,  $p = .000$  level of significance.

### Description of the Results and Conclusion

The purpose of this study was to assess whether a mother's perception of her own body image affected her child's perception of her own body image. Consistent with other research studies (Kater, 2011; Schroeder & Kelley, 2010), the findings indicate that parent/child relationships and mothers' self-concept are associated with children's body image satisfaction. This study had several advantages over previous studies on body image because this research presented the self-reported responses of mothers and their children together. Analysis of the parent/child relationship and a mother's self-perception of her body image provide an extended awareness of a mother's influence on her child's body image perception.

The current research study findings indicate that the parent/child relationship and mothers' self-concept significantly affect children's capacity to develop a positive self-image as a result of the thoughts and behaviors developed throughout the parent/child relationship. Findings such as those indicated on the subscales of the Tennessee Self-Concept Scale (Fitts & Warren, 2003), including physical, moral, personal, family, social and academic/work self-concepts, and those found on the Parent-Child Relationship Inventory (Gerard, 2005), and the Parent Report Card (Berg-Cross, 1997) such as control, limitations, confidence, conflict, satisfaction with parenting, involvement, and autonomy, may be connected with the child's development of a positive body image perspective. Each of these subscales related to self-concept and parent/child relationships empowers the children to establish positive thoughts and behaviors that are connected to the development of a positive body image and allow them to establish their concept of what is acceptable on an internal and external level. When children learn to accept differences in their self-concept of body image, they are more likely to understand and accept the differences in other children related to these concepts. Mothers who promote a supportive environment and undertake their parenting responsibilities in a positive light may impart a more positive self-perception of body image to their children. Mothers surrounded by supportive parents and role models in their upbringing may, in turn, increase their children's ability to demonstrate a positive self-concept and body image perception, resulting in higher self-esteem and self-confidence.

### Summary

The research methods described present the justification for using a quantitative correlational design to determine to what extent a mother's perception of her body image affects her child's perception of his or her body image. The population under investigation included 108 participants (i.e., 54 mother/child dyads). The data collection procedures used four standardized surveys, including the TSCS-2 (Fitts & Warren, 2003) (adult version and child's version), the BIA (Collins, 1991), the PRC (Berg-Cross, 1997) for Children, and the PCRI (Gerard, 2005). Descriptions of the instruments included reliability and validity procedures confirmed through comparisons of the current reliability and validity data to past research results for reliability and validity. Chapter 4 included a summary of the data analysis by research question. Data were displayed using charts and graphs to analyze the results.

The data were broken down by hypothesis to establish how the individual components of the TSCS-2 (Fitts & Warren, 2003), the BIA (Collins, 1991), the PRC (Berg-Cross, 1997) for children, and the PCRI (Gerard, 2005) were related to the overall significance of body image.

Chapter 5 represents the conclusions made from the resulting data analysis and concludes with recommendations for future research studies and the implications of this study.

The purpose of this quantitative correlational descriptive study was to assess body image from a parental perspective to determine what effect if any, a parent's perception of body image has on a child's perception of his or her body image. The resulting evidence from the collected data supported the hypothesis that a mother's perception of her body image influences her child's perception. Overall results supported a mother's influence on a child's body image perception through self-concept and the parent/child relationship. Analysis of the subscales of the TSCS-2 (Fitts & Warren, 2003) for children and adults, along with the PRC (Berg-Cross, 1997) for children and the PCRI (Gerard, 2005) revealed several subscales from the mothers' data results that significantly influenced body image perception in young children. Data also revealed that mothers had a more significant effect on children than the children had on their mothers.

### **Major Findings and Conclusions**

Children frequently imitate their parents' thoughts and narrow-mindedness regarding body image perception. Because a person's perception is individualistic by nature, so are those factors that affect body image perception. It is critical for healthcare professionals, educators, and parents to understand how they can reinforce the development of a positive body image perception in children. Children are acutely aware of the beliefs and preconceptions their parents hold. As in the results revealed in this study, any comments expressed by a parent can directly influence a child in a positive or negative direction. Parents might find it beneficial to focus on building character and personality in children and their talents rather than on body image and appearance-related issues.

While some awareness of body size and shape is a normal part of growing up, parents and educators must become more sensitive as children approach the adolescent years and become more acutely aware of their appearance. At this stage in development, parents, educators, and medical professionals must assist children in realizing that their feelings about their appearance are normal. The results of this study revealed that a positive and healthy parent/child relationship could assist children in maintaining a positive body image perception. Self-esteem, self-control, confidence, and a strong parent/child relationship are critical factors in developing a healthy body image in children. A strong parent/child relationship has been found to correlate with a strong body image perception.

### **Implications**

The constructs of body image, self-concept, and the parent/child relationship were measured as follows. Body image was measured using the Body Image Assessment (BIA) (Collins, 1991). As previously indicated, there appeared to be significant relationships between a mother's perceived and desired body image and her child's perceived and desired body image. While the mothers correlated positively with each other on perceived and desired body image, this correlation appeared to have a significant effect on their children, with strong positive correlations in weight, height, BMI and perceived and desired body image. While most mothers and children accurately indicated their perceived body image, in almost all cases, they indicated that they desired to be thinner than they were.

Self-concept was measured using the TSCS-2 (Fitts & Warren, 2003). The subscales of the TSCS-2 (Fitts & Warren, 2003) were designed to provide a self-report of an individual's specific areas of experience. Each of the subscales on the TSCS-2 (Fitts & Warren, 2003) contributed significantly to the development of self-concept in children. When the scores of the mothers were compared to their children's scores, significant correlations resulted, indicating that the mothers often influenced the development of self-concept in their children. Findings such as those indicated on the subscales of the TSCS-2 (Fitts & Warren, 2003), including physical, moral, personal, family, social, and academic/work self-concepts, had the most significant impact on the development of self-concept in children and their mothers.

Parent/child relationships were measured using two formats. The first was the PCRI (Gerard, 2005), and the second was the PRC (Berg-Cross, 1997). The PCRI (Gerard, 2005) and the PRC (Berg-Cross, 1997) measured the significance of subscales such as control, limitations, confidence, conflict, satisfaction with parenting, involvement, and autonomy and their connection with the child's development of a positive body image perspective. These subscales were measured using a Pearson product-moment correlation and significantly influenced the parent/child relationship.

### **Recommendations to Leadership**

Understanding how body image manifests itself in boys and girls in different forms is a practical guide to assessing body image in young children. Self-concept and parent/child relationships are two critical mechanisms necessary to improve overall body image perception among children. The overall dynamics of the parent/child relationship, such as self-esteem and self-concept (Fitts & Warren, 2003) have been found to positively correlate with the development of a strong body image perception in children. Bronfenbrenner's (1979) Ecological System Theory Model provides the structure for the cognitive aspects of body image and basis of the relationship that occurs between parents and their children. Bronfenbrenner's model is beneficial in assisting healthcare professionals, educators, and parents in understanding how a parent's knowledge, skills, and level of engagement with his or her children can affect the development of a positive body image in young children. The results of this research study can serve as a guide in developing educational materials that can benefit children in understanding how the human body progresses through different stages of development.

This study provides evidence that leadership education directed at parents, healthcare professionals, and educators can effectively promote a positive body image in children. Reports of low self-esteem typically advocate a child's dissatisfaction with their body image, lack of limit setting, control, and confidence, parents' level of satisfaction with parenting, parental involvement with their children, and parents' inability to encourage autonomy in their children. Findings indicate that parent and family variables associated with body image behaviors directly affect children's cognitions about body image development. These variables may be important targets for intervention programs to assist children in understanding their perceptions of body image.

### **Future Research Recommendations**

Parents are considered the driving force and sociocultural role models in promoting body image concerns among children (Rodgers, 2009). There is much to gain by developing a better understanding of the influence of parents on their children's body image perception. While parents act as role models, providing an encouraging or critical influence has been known to be a powerful influence on the development of body image in children (Keery, Eisenberg, Boutelle, Neumark-Sztainer, & Story, 2006; Rodgers & Chabrol, 2009). While both parents play a crucial role in influencing body image in children, several studies (Choate, 2008; Knauss, Paxton, & Alsaker, 2007) suggested that girls become more acutely aware of and more vulnerable regarding body image concerns than boys. Future studies should explore the role of gender differences in parental influences on body image in children and examine the role of comments made by parents regarding weight and body image and their effect on children.

### **Summary**

According to Kater (2011), girls struggle more with body image perception than boys. Factors affecting children's body image have been found to be different in boys and girls. Girls tend to internalize body image ideals and the pressure to achieve these sociocultural goals, whereas boys externalize the pressure to achieve a more muscular physique and masculine appearance. Body image perception in children was influenced mainly by a mother's perception of her body image, her self-concept level, and the intensity of the parent/child relationship. A child's self-concept and the relative closeness of the child/parent relationship were found to directly influence the mother's behavior, indicating the child's level of body image satisfaction. Limit setting, control, satisfaction with parenting, involvement, and the encouragement of autonomy in children appear to be the most important variables to target in the intervention and treatment of body image programs for children. Current findings in this study indicated that mothers significantly influence behaviors that affect body image perception in children. The level of body image satisfaction is dependent upon the impact of these variables. The evidence suggests that a mother's self-concept does, in fact, directly influence her child's self-concept. The data also concluded that the parent/child relationship affects children's body image development. Actual data noted a high significance in the subscales of control, limit setting, confidence, conflict, satisfaction with parenting, involvement, limit setting, and the encouragement of autonomy in children. In conclusion, a mother's perception of her body image significantly affects her child's perception of his or her body image as a result of a strong self-concept and a resilient parent/child relationship.

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