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FEATURE

Attitudes of Filipino Women Towards Body Weight in Children

Lynn Merklin

ABSTRACT-*Purpose: This study focuses on identifying what body weights Filipino mothers in Silang, Cavite, consider desirable in children, and what their attitudes are towards overweight in children.*

Methods: A qualitative research design was chosen to assess personal attitudes. Participants were Filipino mothers residing in Silang, Cavite, from low, average, and above-average income levels. The method planned was a combination of questionnaire and focus group. Personal interviews were also used to collect data from women who were unable to attend a focus group discussion. The questionnaire asked for routine demographic data and included a question asking for identification, from a set of drawings, of desirable body weights for children (ages 4 through 11). During the focus group discussions and interviews, the women were asked why they chose as they did, and their feelings towards the extremes represented. The drawings were used as reference points to discover what the women's attitudes were towards the range of body weights.

Results: In response to the question of which body weight is desirable for children, the most favorable choice was drawing number three for girls (62%) and boys (57%). For girls, the next most desirable body weight was drawing number four (28%). For boys, the second choice was drawing five (20%), followed closely by drawing four (17%). In the high income category, 50% of women preferred drawing number four for girls, and 67% preferred drawings four or five for boys.

Conclusions: As a whole, the Filipino women represented in this report prefer children to be of the body weight shown by drawing number three. They are aware of the familiar problems of malnutrition, as represented by drawing number one. They are also aware of the health problems associated with obesity, as represented by drawing number seven. There appears to be a preference for

greater weight in boys than in girls. There also appears to be a tendency for women of higher income level to choose higher body weights as desirable for both girls and boys. It seems that they feel that a little extra weight in childhood will help to guard against disease. They indicate that this weight will not be permanent, but will easily be lost as children, particularly boys, become more active.

Recommendations: The results of this study may be useful when planning health interventions for overweight children. The apparent preference by women of above average income for greater body weight in children needs to be further investigated, especially as interventions are planned.

Introduction

As a health educator, I am naturally interested in the health of those around me. I am an American, from a country where approximately two thirds of the population is overweight. The Philippines is in stark contrast to this, as generally Filipinos are slim. Over the three years that I have lived in the Philippines, however, I have begun to see a shift. I have observed more and more overweight people.

One of the most disturbing things about the trend towards weight gain in the Philippines is the increase in overweight children. When I came three years ago, I do not remember seeing many overweight children. Now it seems they are everywhere. Whenever I go to the nearby shopping malls, I see many waddling along with their parents. I feel sorry that they are beginning life in this way. I realize too, that being overweight now sets them up for being overweight as adults. With this comes increased risk of numerous chronic diseases.

The World Health Organization, Western Pacific Region, in their focus on child and adolescent health and development, says that, "Those most at risk [of obesity] are the well off in less affluent countries and the poorer in the most affluent countries" (n.d., ¶ 3). This appears to be the case in the Philippines. Very few of the children in my surrounding community, who live in poor or average income families, are overweight. The overweight children that I have observed have been in places frequented by those with higher incomes. They are eating in restaurants, and are often accompanied by well-dressed adults.

Television advertisements frequently show overweight children. A common theme seems to be to buy a certain product so that the

child will reach his fullest potential, so he will be smart or "gifted." The children used in these commercials are often overweight.

A recent World Health Organization (WHO) consultation investigated appropriate body mass index (BMI) in Asians. The consultation was convened because of apparent increases in Asian populations of Type II diabetes and cardiovascular risk factors, and because of evidence that certain Asian populations actually have a greater percentage of body fat for a given BMI than Caucasian populations. Though no attempt was made to redefine BMI for specific Asian populations, it was noted that in populations with proportionately more body fat for BMI, the incidence of overweight and obesity might, in fact, be much higher than it appears. In this situation, interventions aimed at reducing body weight to reduce cardiovascular risk and Type II diabetes would need to include those previously classified as being of normal BMI. The consultation indicated that there is a need for further study in the area of attitude towards obesity, especially obesity in children, to help health personnel in planning interventions for Asian populations (WHO, 2004). It is this subject that I wish to pursue in this study.

I would like to know what body weight Filipino women consider desirable in children, and what their attitudes are towards overweight and obesity in children. Are overweight children considered advantaged? Are they thought to have a higher IQ, as the television commercials would lead us to believe? This information may be valuable in addressing the issue of overweight in future intervention programs.

Studying attitudes is difficult to do in a quantitative research design. To find out attitudes, one must talk to directly with the people. One needs to really listen to their feelings and ideas to understand. When talking about overweight and obesity in children, the caregivers are the ones who can offer the most insights. It is for this reason that I have chosen to do a qualitative research design involving focus group discussions with Filipino mothers for this study.

Literature Review

Childhood overweight and obesity are on the rise throughout the world. According to the National Center for Health Statistics, the United States' 1999-2002 National Health and Nutrition Examination Survey (NHANES) estimated that 16% of American children, aged 6–19 years, were overweight. This was up from 11% in 1994 (Health E-

Stats, 2004). Many developing countries are experiencing this same trend. De Onis and Blossner (2000) did a comparison study of 94 countries to analyze the prevalence and trends of obesity worldwide. In 1995, the incidence of overweight in children under the age of five in Latin American and Caribbean countries was 4.4%, in Africa, 3.9% and in Asia, 2.9%. Because of the large population of Asia, however, they estimate that 60% of overweight children in developing countries live in Asia. For the 38 countries that had data from more than one year, 16 of those showed rising trends. The Western Pacific Region of the WHO says that approximately 13% of school children in Singapore are obese, a problem that was "virtually unknown" before (n.d., ¶ 1). Obesity among 5 to 12-year-olds in Thailand increased "from 12.2% to 15.6% in just two years" (WHO, 2003, ¶ 2).

In adults, obesity is often associated with a wide variety of other conditions, including high blood sugar, insulin resistance, high blood lipid and triglyceride levels, and high blood pressure. This collection of conditions is known as metabolic syndrome. This combination of factors increases the risk of diabetes, heart disease, and other chronic diseases. A recent study by Weiss and associates (2004) explored the prevalence of metabolic syndrome associated with obesity in children and adolescents. They studied 439 obese children and adolescents, and found that as the level of obesity increased, so did the incidence of metabolic syndrome. Each of the factors associated with metabolic syndrome increased, independent of age, sex, and stage of puberty. Weiss et al. explored the prevalence of metabolic syndrome associated with obesity in children and adolescents. They studied 439 obese children and adolescents and found that as the level of obesity increased, so did the incidence of metabolic syndrome. Each of the factors associated with metabolic syndrome increased, independent of age, sex, and stage of puberty.

Unfortunately, mothers do not always recognize obesity in children. A study conducted at a pediatric medical practice evaluated parents' perceptions of their children's body weight using a visual scale. They found that parents of overweight 4 to 8-year-old children generally underestimated their children's weights (Etelson, Brand, Patrick, & Shirali, 2003). A study of urban, African-American caregivers showed that, while a child may be medically categorized as obese, the parents did not recognize it as that until the obesity was more extreme (Thompson & Story, 2003). Jain et al. (2002) found that mothers of overweight preschoolers did not feel their children were overweight as long as the children were active and had good appetites. They used terms like "thick" and "solid" to describe their

children. In a U.S. study of 622 mothers with children between the ages of 23 and 60 months, it was found that most mothers (79%) failed to recognize that their overweight children were indeed overweight (Baughcum, Chamberlin, Deeks, Powers, & Whitaker, 2000). Another U.S. study examined the beliefs of 200, mostly Hispanic, parents of obese preschool children. Though the children measured in the 95th percentile of weight for height, 35% of the parents did not believe that their child was overweight. When asked to comment on their child's weight, 43% said their child's weight was "fine" (Myers & Vargas, 2000). A large-scale study of 5,500 children, aged 2 to 11 years, using NHANES III data, compared mothers' perceptions of their children's body weights with measurements of BMI. Approximately one third of mothers classified their overweight children as being "about the right weight." Interestingly, mothers of at-risk boys were more likely to classify them as "about the right weight" (84.7%) than mothers of at-risk girls (70.4%). It was also noted that mothers were less likely to identify younger children as overweight than older children (Maynard, Galuska, Blanck, & Serdula, 2003).

Traditionally, the Philippines has struggled with underweight in children. Indeed, this is still a problem, with approximately 27% of children 0 to 10 years shown as being underweight for their age in the Sixth National Nutrition Survey done in 2003. Unfortunately, the incidence of overweight in children 6 to 10 years of age has risen from being negligible in 1998 to 1.3% in 2003 (Food and Nutrition Research Institute [FNRI], 2004). One of the regions with a higher incidence of overweight in children is the National Capital Region, which is the area around and including Manila (FNRI, 2001). This coincides with the WHO's (n.d.) statement of people in developing countries with higher income levels being at higher risk of overweight and obesity.

Though studies have been done to investigate maternal perceptions of overweight in children, the author could find no studies to investigate these attitudes among Asians in general, or among Filipinos in particular. Furthermore, nothing was found to indicate what body weight Asian women consider to be desirable in children in the first place. Therefore, this study focuses on identifying the attitudes of Filipino mothers towards the various body weights of children. This includes discovering what body weight they consider desirable, and specifically, what their attitudes are towards overweight in children.

Methods

Children's body weights are directly affected by the foods they eat, both in type and amount, and mothers are the primary gatekeepers for children's food choices. The mothers' expectations may also affect children's eating behaviors. Therefore, the sample chosen consisted of women who are currently, or have been mothers. No attempt was made to limit or designate ages of participants. They were contacted, and meetings were arranged, with the help of local midwives.

To find out what body weight is considered desirable in children, it would have been possible to merely use a quantitative design. In fact, this question was placed within a questionnaire. However, to understand attitudes and reasons behind the women's choices, it was necessary to use a qualitative study design, to allow the women to express their feelings. Focus group discussions were used for this, with personal interviews being conducted with women of higher income, as they were not able to conveniently meet together.

Participants came from three barangays in Silang, Cavite, with the intention of representing three income levels. Eleven women from one barangay comprised one focus group, and 13 women from another barangay participated in a second focus group. These women were from low and average family incomes. It was not possible to arrange a focus group of women of high family income, therefore, individual interviews were conducted with six women of that category from a third barangay.

The method planned was a combination of questionnaire and focus group, with questionnaires being filled out prior to the focus group discussions. Because the author does not speak the local language, all communication was done in English. The questionnaire asked for routine demographic data, including family income, and included two questions asking them to identify, from a set of drawings and photos, what they considered to be desirable body weights for children (ages 4 through 11). Then, during the focus group discussions and interviews, the women were asked questions to discover why they chose the drawings they did, and what their feelings were towards the extremes represented. The drawings and pictures were used as reference points rather than terms like "overweight," "obese," "underweight," "normal," or "healthy" to discover what the women's attitudes were towards the range of body weights. I was especially interested to find out what advantages or

disadvantages they associated with overweight or obese children, in terms of IQ, health, and ability, and if family income had any effect on their perceptions.

Participation was strictly voluntary. Participants were informed that their opinions were desired regarding body weight in children, and that the information they would give would be used for research purposes only. Participation was anonymous, as no names were recorded in the focus groups, interviews, or on the questionnaires. Focus group discussions were recorded, and participants' consent was obtained before the discussions commenced. Information regarding specific participants will not be shared, however, individual comments will be shown in italics to illustrate research findings. Participants were free to withdraw from participation at any time. No coercion or bribery was used to keep their participation. It is believed that no harm was done through participation in this study. The questions were directed only at obtaining the information related to the research questions.

The questionnaire used in the study is shown on Figure 1 along with the questions used in the focus groups and interviews. The figure drawings used for this study were the World Health Organization and the Pan American Health Organization's modification of Collins' figures (Collins, 1991).

Questionnaire

Barangay _____ Town _____

Age _____ Number of Children _____

Please write the number of your children in each age category

_____ Babies (0-2 yrs) _____

_____ High School age

	Preschool age _____ Elem. School age	_____ College age _____ Grown Children
Family Income *(please check one)*	___ under 5,000 php/mo ___ 5,000-9,999 php/mo ___ 10,000-14,999 php/mo	___ 15,000-19,999 php/mo ___ 20,000-49,999 php/mo ___ 50,000 or more php/mo
Education *(check level completed)*	___ Elementary school ___ High school	___ College ___ Master's degree or higher
Please examine the line drawing, and choose the body weight that you consider desirable for children. Indicate your choices for girls and boys by writing the number shown on the figure.		___ girls ___ boys

Figure 1. Questionnaire.

Focus Group Questions

1. Why did you choose the pictures you did?

2. Which of these children would be more likely to do better in school? Why?

3. Which of these children would be more likely to have a higher IQ? Why?

4. Do you consider the weight of any of these children to be a problem? Why?

5. Would any of these children be more likely to experience future health problems? Why?

6. Do these (pictures of heavier) children have any advantages over the others? What advantages do they have?

7. Do these (pictures of heavier) children have any disadvantages over the others? What disadvantages do they have?

Results

Thirty women filled out the questionnaires and participated in the focus groups and interviews. In response to the question of which body weight is desirable for children, the most favorable choice for girls and boys was drawing three. For girls, the next most desirable body weight was drawing number four. Interestingly, for boys, the second choice was drawing five, followed closely by drawing four (see Table 1).

Table 1

Desirable Body Weight for Girls and Boys

Girl's Weight			**Boy's Weight**	
Drawing	**Frequency**	**Percentage**	**Frequency**	**Percentage**
# 1	1	3%	---	---
# 2	1	3%	1	3%
	18	62%	17	57%
# 3				
# 4	8	28%	5	17%
# 5	1	3%	6	20%
# 6	---	---	1	3%
Totals	**29**	**100**	**30**	**100%**

In preparation for this research, the author spoke with several Filipinos to determine what was considered to be low and average family income. They indicated that monthly income under 10,000 pesos per month is considered low, and that 10,000 to 15,000 pesos per month would be considered average. During data collection, the group that was to represent average income indicated that they too,

had family incomes below 10,000 per month. The midwives that were assisting considered those receiving less than 5,000 pesos to be very poor. Some of those were squatters. Generally, those with incomes between 5,000 and 10,000 owned houses of average type structure. For purposes of comparison then, what the author had previously considered to be all in one category has been divided.

Two of the participants that represented the higher income category indicated cash income at low and average levels. In considering wealth and economic status, more is involved than just monthly income. Ownership of land, house, and business plays a role in income and economic status. All of the women interviewed separately were from a high-income neighborhood, with well-built and well-furnished houses. It was indicated to me that these women also owned land and businesses. Therefore, even those two that indicated lower cash incomes were considered to be part of the higher income category.

Tables 2 and 3 display information regarding choice of desirable body weight for the three modified income categories: low income being less than 5,000 pesos per month; average income between 5,000 and 10,000 per month; and high income being generally over 15,000 per month. There appears to be a tendency for women in the higher income level to choose higher body weights as desirable for both girls and boys.

Table 2

Comparison of Desirable Body Weight for Income Groups - Girls

	Low Income		**Average Income**		**High Income**	
Drawing	**Freq.**	**%**	**Freq.**	**%**	**Freq.**	**%**
# 1	1	5.9	---	---	---	---
# 2	---	---	---	---	1	16.7
# 3	12	70.6	4	66.7	2	33.3
# 4	3	17.6	2	33.3	3	50.0
# 5	1	5.9	---	---	---	---
# 6	---	---	---	---	---	---
Totals	**17**	**100.0**	**6**	**100.0**	**6**	**100.0**

Table 3

Comparison of Desirable Body Weight for Income Groups - Boys

	Low Income		Average Income		High Income	
Drawing	**Freq.**	**%**	**Freq.**	**%**	**Freq.**	**%**
# 1	---	---	---	---	---	---
# 2	1	5.9	---	---	---	---
# 3	10	58.8	5	71.4	2	33.3
# 4	2	11.8	2	28.6	1	16.7
# 5	3	17.6	---	---	3	50.0
# 6	1	5.9	---	---	---	---
Totals	**17**	**100.0**	**7**	**100.0**	**6**	**100.0**

During the focus groups and interviews, the women were able to explain why they chose the numbers they did as being desirable body weights for children. Unfortunately, two of the three who chose ideal weights less than drawing three did not comment, so data is limited for those who preferred a thinner child. One participant chose drawing number two as desirable for the girls. When asked why she chose as she did, she responded by recalling when her daughter was borderline overweight, and the pediatrician recommended using non-fat milk. She said,

> *Of course the reason was that there would be psychological effects as they grow older. Because you know, girls are more conscious than boys of their weight. . . .* [Although the girl was] *thinner than my little boy, but she gave her the nonfat milk instead of the boy. Because she was more conscious of the effect it would have on her, when she reaches like 12 or 13 . . . you know girls don't lose weight that easily.*

Drawing number three was considered to be most desirable by approximately 60% of respondents. The reasons given for choosing drawing number three included healthy, normal body weight; regular body weight; *slim; balanced;* and *not too fat, not too thin.* The woman who preferred drawing two for girls liked three for the boys. She felt that boys could be a bit bigger than girls, because, according to her pediatrician, *he will lose that weight when he plays basketball.*

Eight women chose drawing number four as desirable weight for girls, while five chose it for boys. Those who chose drawing number four also used words such as *normal, natural, healthy, medium and average.* When asked why they liked the figure that was a little bit

bigger (than three), the women responded by saying that drawing number four looked *strong*. One said that *if they are a little bit bigger, they are healthier and . . . they won't be affected by diseases*, and others agreed that *they won't have so much sickness*.

Six women chose drawing number five as the desirable body weight in boys, and one chose it for girls. Their reasons were that number five was *more strong* and *more healthy*. They also felt it desirable because the child was *not sickly*. One mentioned that *diseases will not be affecting them more*. One woman chose drawing number six for boys, but no mention was made as to why that particular choice was made.

Eleven out of the 30 women desired more weight in boys than girls. Reasons given for this were that boys do *more heavy work* and *because they are more active*. Another said *if he's very active he needs to be more healthier*. They felt that a little more weight was good for boys, and that a boy *will lose that weight when he plays*. One woman who liked the heavier figures said that *at that age, maybe . . . weight is better*.

When asked which of the drawings represented problem body weights, all women identified drawing numbers one and seven. Most women also felt that two and six were problem weights. A couple felt that even five was a problem, and one said *four, going to seven*. One woman, even though she designated six and seven as problem weights, said, regarding the drawings above number four, that *when they grow bigger, I think children slouch when they grow this size. They tend to be sleepy, slouchy*.

To describe the body weights of drawings one and two, the women used words like *malnourished, very thin* and *underweight*. They felt that these children needed *more vitamins* and *more vegetables*. They also mentioned *no energy to play with other children*. They felt that these children would be more likely than normal weight children to have future health problems as adults, as well as having current health problems. One said that children of body weight number one would be more likely to have trouble in school because they are *malnourished*.

The women had more to say regarding drawings six and seven. They said that these children were *too big, overweight, obese,* and *very, very fat*. They said they were *sleepy, slow, lazy,* and *wanted to eat all the time*. One said with a laugh, *they take up more space than the other* [children]. They felt that life for these children is *not easy*. One woman said that *they feel fat, and a little bit . . . hurt*. In terms of

practical difficulties, they felt that these children *can't exercise very well,* and that it is *hard for them to work*. One also mentioned that it is *hard for them to find work when they grow very big* (as adults). Overweight children have *more health problems,* are more *prone to sickness*, and are more likely to experience *asthma, high blood* (pressure), *high cholesterol*, *heart attack* and *heart trouble*, and *diabetes*.

The questions referring to any advantages or disadvantages of various body weights resulted in some confusion in one focus group. When they realized what was being asked, they gave the same responses as they did to the questions about problem weights and future health problems, as described above. Other respondents also indicated the same, and their responses are included as well. The women did not see any advantages to being of greater body weight, as represented by drawing seven. Rather, they felt it was a disadvantage.

Overall, the respondents did not feel that body weight affected intelligence. They said, *even the thin, they have intelligence. They can do . . .* and they are *thin, but intelligent*. As one said, *weight may change, but intelligence is not dependent on weight. It depends on their . . . mind*. However, some did feel that overweight may contribute to difficulties in school. One focus group said that the children represented in the lower number drawings would do better in school than those on the overweight side. One interviewee said that children at the higher weights *tend to be sleepy*. One woman interviewed felt that the middleweight children would have better intelligence. Another said that the middleweight children *can think more academically. . . . They can think more, because I think they eat better foods, nutritious foods*.

Earlier in this report, it was mentioned that several advertisements on Philippine television use overweight children to promote their products, like milk powder and vitamins, often using terms such as "gifted" to describe the children who use these products. When asked if they believed the visual suggestions that overweight children are the gifted ones, the women strongly disagreed. One did say, however, that because of chemicals found in some milk, the advertised fortified milk powder may help a small child's brain to develop fully.

Discussion

As a whole, the Filipino women represented in this report prefer children to be of the body weight shown by drawing number three (62% for girls and 57% for boys). They are aware of the familiar problems of malnutrition, as represented by drawing number one. They are also aware of the health problems associated with obesity, as represented by drawing number seven.

There are some women who prefer children to have a little extra body weight. The upper middleweights of drawings four and five were chosen for girls by 31% of the women, and for boys by 37% of the women. It is interesting to note that the figure is higher for boys, and that, in fact, 20% of the respondents chose drawing number five as desirable for boys. This seems to coincide with the results of Maynard et al. (2003), in which mothers seemed to have more tolerance for overweight in boys than in girls, being more likely to classify their at-risk daughters as overweight than their at-risk sons. There appears to be higher tolerance of, or even preference for, greater weight in boys than in girls.

The sample of this small study was not as inclusive of varying family incomes as the author would have desired. Most of the data (24 out of 30 respondents) came from people earning less than 10,000 pesos per year. Families in this income bracket are spending most, if not all, of their income on the necessities of food, household supplies, and clothing. Information from a friend of the author suggested that a family of four spends approximately 4,000 to 5,000 pesos per month just on food and necessary toiletries. Families with incomes at this level do not have money to spend on extras. Even most of the local fruits are avoided because of the high prices. Families in this income bracket have quite different lifestyles from those in higher income brackets. In this study, only 6 of the 30 respondents were from a higher income level.

Differences in income level and lifestyle may carry over to attitudes about body weight. Even though the sample of women of higher income was small, it appears that a greater percentage of these women prefer children to have a little more weight. Fifty percent of women in the high income category preferred drawing number four for girls, and 67% preferred drawings four or five for boys. Though they recognize that overweight and obesity have serious consequences, and they recognize the heavier figures as being at risk, it appears that they do not view the upper middleweights represented by drawings four and five as a problem. It seems that they feel that a little extra weight in childhood will help to guard against diseases. They indicate that this weight will not be permanent, but will easily

be lost as children, particularly boys, become more active. This perspective needs to be further investigated among this income level, especially as interventions are planned. This could possibly be pursued using a modified questionnaire, thus not taking a large amount of time for either the researcher or the participants.

Though the incidence of overweight in children is still small in the Philippines, it is on the rise, following the trend of other Asian countries. Public health educators and organizations need to be prepared to effectively deal with the problem as it arises. Part of this preparation is to understand the attitudes of the people towards the problem. It is hoped that the results of this study can contribute to this understanding.

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Lynn Merklin, MPH
Instructor
Adventist International Institute of Advanced Studies