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Body image attitudes and concerns among indigenous Fijian and European Australian adolescent girls

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Abstract

Research on body image has primarily been conducted among Western women who highly value the thin ideal body size. There has been limited research that has examined body image attitudes among Fijian adolescent girls who are exposed to both traditional sociocultural pressures that promote a larger body size and Western pressures that promote slimness. Using in-depth semi-structured interviews, we examined the factors associated with body image attitudes and concerns among a sample of 16 indigenous Fijian and 16 European Australian adolescent girls aged between 13–18 years. An inductive analysis of girls' responses indicated that both groups of girls experienced body image concerns including body dissatisfaction, a preference for thinness and concerns associated with weight gain. These findings have implications for our understanding of the role of culture in shaping body image among girls and may prove useful in the development of future survey research that can be implemented among both Fijian and Western adolescents.

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Introduction

Over the past few decades, there has been an increase in the prevalence of obesity among Pacific, including Fijian, populations (Coyne, 2000; Flegal, 1999; Hodge et al., 1994). Studies with indigenous Fijian women have indicated prevalence rates of overweight and obesity that range from 30% to as high as 84% (Becker, 1995; Becker, Gilman, & Burwell, 2005; Hawley & Jansen, 1978). This prevalence of overweight and obesity is among the highest in the world (Cameron et al., 2003; Taubes, 1998).

Whilst the research with Fijian women is somewhat limited, there are several studies that demonstrate the high prevalence of elevated weight among all groups of Pacific women. Pacific women have been found to experience a dramatic increase in weight after an age of 21 years (Craig, Swinburn, Matenga-Smith, Matangi, & Vaughan, 1996; Metcalf, Scragg, Willoughby, Finau, & Tipene-Leach, 2000; Wilkinson, Ben-Tovim, & Walker, 1994) and tend to maintain a larger weight status than both their Western (Craig, Halavatau, Comino, & Caterson, 1999) and male (Englberger, Halavatau, Yasuda, & Yamazaki, 1999) counterparts. Overweight and obesity is also more prominent for

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those Pacific women who either adopt a Westernized lifestyle (McGarvey, 1995) and/or reside in Western societies (Brewis, McGarvey, Jones, & Swinburn, 1998; Metcalf et al., 2000; Simmons, Thompson, & Volklander, 2001).

Several contemporary explanations that focus on the gradual influx of modernization and Western globalization have been offered to account for the increase in obesity observed in the Pacific (Bindon & Baker, 1985; McGarvey, 1995). Modernization for many Fijians has meant decreases in physical activity associated with subsistence farming, a reliance on motorized transportation and the introduction of sedentary wage earning vocations. This in turn has led to increased access to and consumption of imported and calorie dense foods that have lower nutritional value (National Food and Nutrition Committee, 1997; The Tonga Chronicle, 1993).

Several sociocultural explanations have also been offered to account for these high prevalence rates of overweight and obesity among Fijian women, namely, traditional Fijian values associated with food and community membership (Becker, 1995). Food sharing and consumption in the Pacific has a strong social significance, whereby community networks, together with high social ranking, are all linked with the ability to grow, trade and consume food (Oliver, 1989; Pollack, 2001). As a result, a large body size represented agricultural expertise, community commitment and high quality of care. Other body aesthetic ideals have also been identified as playing a role in the large body size observed among Pacific populations. Certain aspects of a large body size, such as big hips, for Fijian women were associated with enhanced reproductive and child-bearing capacity (Becker, 1995). Likewise, the enlargement of leg and calf muscles reflected the absence of laziness and increased ability to work, and was hence a desirable physical trait (Becker, 1990, 1995; Gregg, 2000; Jones, 1996).

Given that these values regarding body size are quite different to those observed among women in Western cultures, previous studies have primarily focused on the differences in body size stereotypes and ideals observed between these two cultural groups. Whereas Western girls have been found to adopt body size ideals that emphasize thinness (Stice, 1994), Pacific women have been found to associate a large body size with health, nurturance and attractiveness (Becker, 1995). For example, Becker (1995) found that Fijian women rated the most obese figures on a Graded Silhouette scale as representative of high quality of care whilst the extremely thin figures were rated as poorly cared for. Other studies have assessed how these stereotypes are internalized by examining indivi-

dual accounts of body size ideals. The majority of earlier studies with Pacific women from Samoa, Tonga, Cook Islands, New Zealand and/or Fiji typically assessed body size ideals in terms of ideal versus perceived body size and body dissatisfaction. Results from these studies have indicated that older Pacific women prefer larger ideal body sizes whilst younger Pacific women prefer smaller body sizes (Craig et al., 1996, 1999; Matangi, Swinburn, Craig, Matenga-Smith, & Vaughan, 1995). However, those that preferred smaller ideal body sizes selected body sizes that were larger than those chosen by their Western counterparts. Pacific women have also been found to underestimate their own body size (Becker, 1995; Craig et al., 1999), with one study indicating that many obese and overweight Fijian women believed they should maintain their weight (Becker, 1995).

Whilst the majority of these results suggest body image ideals consistent with traditional body stereotypes observed in the Pacific, these studies and other more recent studies have highlighted some instances of body dissatisfaction and preference for thinness among Pacific women (Becker et al., 2005; Brewis et al., 1998). Consequently, these studies have indicated a shift from the traditional emphasis on a large body size to the preference for a thinner body size that more closely resemble those observed in Western culture (Phelps et al., 1993; Tiggemann & Pickering, 1996). For example, Brewis et al. (1998) found high levels of body dissatisfaction and desire to lose weight among Samoan women residing in both Samoa and New Zealand (results were higher for those residing in New Zealand). Furthermore, a recent study with Fijian women indicated an increase in body dissatisfaction over a 9.5-year period (Becker et al., 2005), whilst another study has specifically linked the recent introduction of Western based television in Fiji to Fijian adolescent girls' increased desire to be thinner and their emulation of Western characters and also to increases in body dissatisfaction (Becker, Burwell, Gilman, Herzog, & Hamburg, 2002).

Whilst increases in body dissatisfaction and the desire to be thinner seem to mirror results observed among Western girls, these studies have used different measures to assess these changing body size ideals. For example, Brewis et al. (1998) assessed body dissatisfaction as dissatisfaction with weight, whereas Becker et al. (2002) assessed body dissatisfaction as the desire to eat less. It is unclear whether the desire to eat less is truly indicative of body dissatisfaction given that girls could restrict their eating for a variety of reasons including increasing their health and reducing the risk of gaining weight. Furthermore, it is possible that body dissatisfaction encompasses attitudes towards aspects of the body other than weight. In a more recent study, Becker et al. (2005) directly assessed body dissatisfaction, by asking them if they were satisfied/dissatisfied with their body, rather than weight alone. However, further research is needed with Fijian adolescents to determine which aspects of body image and body satisfaction other than weight are relevant for this group.

A large body shape is traditionally endorsed in Fiji (Becker, 1995) and the Pacific in general (Oliver, 1974; Pollack, 1995). For Western women, cultural values stipulate that a thin body is ideal and representative of beauty, intelligence, wealth and attractiveness (Dittmar et al., 2000; Moreno & Thelen, 1993). However, there is growing evidence to suggest that Western women are experiencing a shift in this idealized body shape to value a curvaceous body shape, rather than simply a slim body (Saling, 2003). This finding has been reflected in popular magazines and the media in general whereby images illustrate a shift from the thin tubular body shape typically viewed and favored in Western media to a more curvaceous body (Guillen & Barr, 1994; Morris, Cooper, & Cooper, 1989).

The specificity of these body ideals have been found to predispose Western women to become dissatisfied with their bodies as they strive to achieve a body that for many is incongruent to the body they maintain. The majority of studies that have investigated Western girls' body image attitudes have focused on body dissatisfaction, in particular, their weight concerns, weight loss behaviors and the desire to be thinner (Paxton, Norris, Wertheim, Durkin, & Anderson, 2005; Van den Berg, Wertheim, Thompson, & Paxton, 2002). Moreover, only a small proportion of studies have used qualitative methods, a procedure that enables more in-depth accounts of adolescents' body image attitudes and concerns (Grogan & Wainwright, 1996; Tiggemann, Gardiner, & Slater, 2000; Wertheim, Paxton, Schutz, & Muir, 1997).

The current study was designed to gain a better understanding of the differences and similarities in body image attitudes and concerns among Australian and Fijian girls. A qualitative approach using individual semi-structured interviews was employed to allow an examination of in-depth and context specific individual accounts of adolescent girls' body image. Specifically examined were girls' attitudes and concerns with weight, size, shape and muscles. This approach was considered particularly useful with Fijian adolescents as there has been little research with this population. Most researchers that have targeted Pacific groups have assumed that measures deigned for Western participants are also valid and reliable for this population. Thus, a qualitative method may reveal that Fijian adolescents have very different body image attitudes, which are not being adequately assessed with current instruments.

Method

Participants

The participants were 16 European Australian and 16 indigenous Fijian girls aged between 13 and 18 years. A summary of the mean age, height, weight and body mass index (BMI) for both groups is provided in Table 1. The criteria for defining and assessing weight status was determined by Centers for Disease Control and Prevention (CDC) percentiles (National Centre for Chronic Disease Prevention and Health Promotion, 2000) for the Australian sample and weight definitions that were based on a cross-cultural sample of children and young adults for the Fijian sample (Cole, Bellizi, Flegal, & Dietz, 2000). Previous researchers have suggested that separate BMI definitions of overweight and obesity be used for Pacific samples. This is because at higher BMI levels, Pacific people have been found to be significantly leaner than Europeans (Swinburn, Ley, Carmichael, & Plank, 1999). Overall, 22% of the sample was overweight (four Australians and three Fijians) and 9% of the sample was obese (two Australians and one Fijian).¹

Materials

A semi-structured interview guide was developed for the larger project associated with this qualitative study that included questions that assessed beliefs, behaviors, future expectations and resources associated with food and eating, physical activity and body image (Williams et al., submitted for publication). Only the body image questions were examined for this paper. The body image sub-section of the interview guide included sections on body weight (in kilos), body size (i.e. small, medium, large), body shape (i.e. figure) and muscles. Specific questions included: "What is your ideal body size/ weight/shape?", "Are you happy with your weight?" and "Would it bother you if you were overweight?". Where appropriate the interviewer followed with more direct probing questions (e.g. "Why would you prefer to weigh less than you do now?").

¹ There was no difference in weight categories for the Australian girls using Cole et al.'s (2000) criteria for defining overweight and obesity. Using CDC percentiles, an additional two Fijian girls would be classified as overweight (these cut-off points are more stringent as they are based on Western samples).

 Table 1

 Average age, height, weight, BMI and weight classification for Australian and Fijian participants

Ethnicity	Age (years)	Height (m)	Weight (kg)	BMI
Fijian $(N = 16)$	16.2 (<i>SD</i> 1.83)	1.63 (SD 0.07) 1.62 (SD 0.06)	62.12 (SD 10.07)	23.3 (SD 3.7)
Australian $(N = 16)$	15.5 (SD 0.63)	1.62 (SD 0.06)	60.43 (SD 9.24)	22.8 (SD 3.2)

The same interview guide was used for both cultural groups, but it was adapted to include probing questions depending on each participant's answers (e.g. where the respondent described dissatisfaction with their current weight, probing questions were primarily centered on the nature of this dissatisfaction and the factors that were perceived to influence it).

A tape recorder with an external microphone and/or an iPod were used to record the interviews. Metric scales were used to record participant's weight in kilograms and a standard tape measure was used to record height in meters. These measures were used to calculate BMI.

Procedure

The Australian sample was recruited from five secondary schools in the Western and South Western district of Victoria, Australia. This area was selected as it is a regional but highly urban area in Victoria. School principals and teachers assisted the researchers in identifying interested participants. A small number of participants were also recruited through personal contacts and by using a snowball technique, where participants were asked if any of their friends from school would be interested in taking part in the study.

Participants in Fiji were recruited from five secondary schools located within Nasinu, a 'peri-urban' area that encompasses settlements and villages north of Suva, the capital of Fiji. Members from the broader research team worked with school principals and teachers to recruit student volunteers. As for the Australian sample, a small percentage of the Fijian sample was also obtained from personal contacts.

At both locations, interested students were supplied with a brief information package outlining the nature of the study and the consent form that needed to be completed by participants and their parent/guardian. The information packs and consent forms were translated into Fijian for the Fijian sample. Only students who returned their signed parental and independent consent form and who verbally agreed to participate in the study were interviewed. Participants received a movie voucher to compensate them for their time.

All participants were interviewed on a one-on-one basis in a private room at a time and place that was

convenient for them and their parents/teachers. Interview settings ranged from vacant classrooms to family homes. Following the interview, students had their weight and height recorded for BMI calculations. All the Australian interviews were conducted in English by the first author. Interviews for the Fijian sample were conducted in English and/or Fijian by the fourth and fifth authors. The interviews lasted between 35 min to just over 1 h. All interviews were tape or digitally recorded.

Coding and analyses

Australian interviews were transcribed verbatim by the first author. Fijian interviews were also transcribed verbatim by the Fijian research team, translated by the fourth and fifth authors and checked by the Research Fellow and the Fiji research coordinator for this project (fourth author). The first author then read all of the transcripts to develop a detailed coding scheme and subset of themes. Subsets of transcripts were read by the second author to provide feedback on the coding scheme that would facilitate the generation of themes. Open, axial and selective coding, utilizing Nudist version six qualitative software program, was used to code, sub-categorize and unify coding of the transcript text (Rice & Ezzy, 1999). Node searches and comparisons to assess similar and different themes across the two groups of participants were also employed to facilitate the cross-cultural evaluations.

The authors further employed inductive thematic analysis (Green & Thorogood, 2004) and modified grounded theory (Shank, 2002) to develop and interpret the themes. Specifically, inductive thematic analysis was used to develop the themes and their links to past research. In addition, personal experiences, observations and discussions with the Fijian research team, young indigenous Fijian locals, their families and other researchers during a 6-week visit by the first author were used to shape the themes.

Results and discussion

The main body image attitudes endorsed by both Fijian and Australian girls centered on their perceived attributes of an ideal female body and their perceptions of their own body. Both Australian and Fijian girls articulated a desire for a body that was collectively identified as 'average' and encapsulated values such as 'fit' and 'curvaceous'. For Australian girls, many of the values attached to an ideal female body were associated with increased aesthetic appeal. In contrast, Fijian girls were more focused on the body's functional qualities such as an increased ability to work.

Girls also described their own bodies and how these compared to their ideal body. Australian girls were found to be very specific about their own bodies, offering constructive criticism and a desire to be smaller. Compared to Australian girls, Fijian girls were explicitly more negative with their descriptions of their own bodies and typically expressed that they were unhappy and dissatisfied with their body. Fijian girls were also found to place more of an emphasis on how the body physically looked and performed, whereas Australian girls articulated preferences for particular body types to enhance its aesthetic appeal or to 'look good'.

Each of the above main themes are illustrated with excerpts which include participants' ethnicity (FJ, Fijian; AUS, Australian), pseudonym, age in years and BMI in parentheses. In some cases, a more detailed extract between the respondent (R) and interviewer (I) is provided.

Perceived attributes of an ideal female body

Attributes of an ideal female body were similar for the two cultural groups. However, compared to Fijian girls, Australian girls were more likely to articulate the female body in terms of specific ideal weights, sizes and shapes. The ideal female weight reported by all Australian girls was 50–70 kg and the ideal size was small-medium.

- I What do you think the perfect weight for girls of your age is?
- R About 65–70 kg. (AUS Simone, 16 years, BMI = 21.9)

Fijian girls, on the other hand, were unable to conceptualize the ideal female body in terms of weight and size. For example, when asked for the ideal female weight in kilograms or the ideal size in clothes for females, the majority of Fijian girls would reply that they 'didn't know'.

- I Would you know the perfect weight for Fijian girls, what weight it should be?
- R No. (FJ Vani, 19 years, BMI = 22.9)

Those that did provide a response reported that the ideal weight was small and was 50 kg or less. However, it is unclear how accurate these values are given that many Fijian girls were inaccurate and under-estimated their own weight and size by up to 30 kg.

For Fijian girls, it appears that these specific indexes of weight and size have limited meaning and are, therefore, not as highly valued as they are among the Australian girls. This may be attributed to the tendency for Fijian girls to have limited access to scales. Fijian girls are also more likely to have their clothes made to size rather than purchased as 'pre-sized' garments. Moreover, in a culture where a female body is valued for its physical or reproductive capabilities (Oliver, 1989), these individual anthropometric measurements have little meaning. These results suggest that whilst Fijian girls are able to construct preferred and ideal body sizes, they base their judgments on the physical appearance of a female's body instead of specific weights and clothes sizes that possibly have little meaning. It is likely that other aspects of the female body that have more physical implications (such as the relationship between bigger hips and child-bearing capacity) are more relevant for Fijian girls. For Australian girls, judgments about physical appearance are often linked to specific weights that are then used as indicators of other values such as health and fitness (e.g. BMI cut-off's) (Zdrodowski, 1996).

References to body shape and muscle tone were also incorporated into girls' descriptions of an ideal female body. In terms of the ideal shape and muscle, Fijian girls reported that the perfect body for females was 'toned', 'strong', had 'hips' and was 'fit'. The term 'fit' for Fijians has several meanings including physical fitness (strength and firm muscle tone), nice appearance (good looking) and slimness. Fijian girls also used Western based media personalities to illustrate these ideal female figures.

- I Who do you think has the perfect figure?
- R J Lo (Latin-American singer).
- I Why do you say J Lo?
- R Ahh (laughs). I mean her hips (laughs).
- I Is she skinny?
- R No.
- I And fat?
- R Not that fat.
- I So you like her hips, eh?
- R Laughs (agreement). (FJ Alisi, 18 years, BMI = 19.3)

Similarly, the Australian girls articulated an ideal figure that deviated from the traditional tubular body

favored by Western women (Garner, Garfinkel, Schwartz, & Thompson, 1980), to a more voluptuous and curvaceous body. For example, Australian girls reported that they liked a female body that had some hips and curves. Many Australian girls also stated that they preferred an hourglass shape instead of a straight 'up and down' or 'ruler' shape. This finding is consistent with more recent research (Dittmar et al., 2000) and may suggest that the more shapely and curvaceous figures preferred in the mid 1900s, such as Marilyn Munroe, are returning as favorable or perhaps perceived as more attainable for Australian girls. This is further emphasized by more general narrative accounts of the ideal female body from Australian girls who indicated preferences for an 'average' or 'medium' body that was neither 'fat' nor 'skinny'. A toned body that was not overly 'built' was also perceived as desirable. In addition, many Australian girls also described a dislike for extreme thinness.

"If you are skinny, but not fat, but not too skinny... there is like a certain amount of weight that, well a skinniness that looks good and then the ones that are just gross... it doesn't look healthy if your bones are sticking out and you are that skinny". (AUS Georgia, 15 years, BMI = 29.3)

"Well girls with huge muscles, like how you see those weight lifters and stuff, I don't really, that's not, someone is going to walk down the street and not look like that obviously, but I reckon just medium, if they do sport and stuff, if they try and tone their muscles and stuff, it all depends on what sports they are doing, I reckon just ... not really bulgy or anything just toned and stuff like that". (AUS Kate, 16 years, BMI = 18.7)

Clearly these findings suggest that the ideal female body is multidimensional and includes being thin, toned and curvaceous. In previous studies, researchers have frequently only highlighted weight concerns and the pursuit of thinness (Adams et al., 2000; Phelps et al., 1993; Sands, 2000).

We found no evidence that Fijian girls valued a large body size. These results are consistent with research with adolescent Fijian girls (Becker et al., 2002) and appear different to those observed with older Pacific women who identify more closely with traditional preferences of a large body size (Craig et al., 1996, 1999; Matangi et al., 1995). However, it is possible that the strength related attributes associated with an ideal female body for Fijian girls is linked to traditional preferences for a large body that is strong rather than fat. These results are also consistent with previous research with Fijian women whereby the ideal shape was associated with physical characteristics that suggested strength or the ability to work hard (Becker, 1990, 1995).

Perceptions of own body

The focus on weight and size was a salient theme for many Australian girls' descriptions of their own body. For example, the majority of Australian girls were extremely accurate (within 5 kg) at predicting their current weight. These findings are inconsistent with previous research that has indicated Western women's tendency to overestimate their body size and believe they are much larger than they are (Phelps et al., 1993). However, it is not surprising that Australian girls were accurate in predicting their own weight given the growing focus and awareness of issues such as obesity (Evans, Renaud, Finkelstein, Kamerow, & Brown, 2006) and also their fascination and preoccupation with their body (Bordo, 1993; Gregg, 2000). Furthermore, it is possible that the Australian girls were less likely to perceive themselves as larger, as the gap between their perceived actual and ideal body was not particularly large.

In contrast, almost all of the Fijian girls had no concept of their weight (in kilograms) or size (in clothes), and as a result were very inaccurate at estimating their body by these standards. For example, in one case a Fijian girl underestimated her weight by 30 kg. Many had never weighed themselves, did not own scales or did not attend to weight measurements acquired by staff at school. The majority of Fijian girls had to check the size on their school uniform during the interview itself to provide an estimate of their current size.

- I Do you know your weight right now?
- R No.
- I Did you ever weigh yourself?
- R Yeah. When the nurses came around. This year. Last week.
- I Do you know your weight?
- R No, I didn't see. (FJ Loate, 15 years, BMI = 22.9)

Body dissatisfaction

Although many Fijian girls stated that they were happy with some aspects of their body, over one-half of the remaining Fijian girls reported a general dissatisfaction with their body. The main area of dissatisfaction for Fijian girls was their weight with over one-half of these girls reporting that they were 'too big' or 'fat'.

- R I'm very short and fat and look ugly.
- I Are you happy with your figure?
- R No. (FJ Miriama, 18 years, BMI 29.9)
- I Is this your ideal weight, do you like what you are right now?
- R No, I want to be slim, right now I am fat ... I don't want to be fat ... like right now, most of my clothes don't fit me, (they are) too small, even my skirt is tight.
- I Would it worry you if you were smaller?
- R No, because I like to be small". (FJ Mere, 16 years, 22.6)

In addition to this global and weight related body dissatisfaction described above, Fijian girls also reported feeling dissatisfied with certain, more specific, aspects of their body such as their stomachs and hips.

"My hips are growing right out It's too big, my stomach is big, it's really out of shape". (FJ Kelera, 16 years, BMI = 30.1)

Over one-half of the Fijian girls also reported feeling dissatisfied with their current muscles.

I What about you, are you satisfied with your muscles? R No. It's very soft when I.

I It's soft when you flex?

R Yeah. (FJ Luisa, 14 years, BMI = 21.1)

However, for a small proportion of Fijian girls the distinction between body satisfaction and dissatisfaction was not always clear. In some cases it is possible that feeling 'fat' is not indicative of body dissatisfaction. For example, some Fijian girls reported feeling satisfied with their weight despite reporting that they felt too fat.

R "Maybe I am fat.I Is that what you think?R (nods)I Are you happy with your size?R Yes. (FJ Savaira, 13 years, BMI = 27.2)

Likewise, some Fijian girls reported that they were satisfied with their size despite being dissatisfied with other aspects of their body such as their muscles. Therefore, it is possible that feeling fat or being dissatisfied with certain body dimensions is not necessarily a source of shame and distress for Fijian girls. Instead, feeling fat or being dissatisfied may be used in some contexts to mean healthy or fit. In contrast, whilst the majority of Fijian girls reported global body dissatisfaction, the majority of Australian girls reported, on the whole feeling satisfied with their body.

"I am most satisfied with my weight, cos I am enjoying the way, like how much I weigh and everything like I don't really want to be any thinner or at the moment I don't really want to be any fatter". (AUS Kate, 16 years, BMI = 18.7)

Only one Australian girl referred to herself as 'fat' compared to over one-half of the Fijian sample. However, Australian girls reported dissatisfaction with certain aspects of their body including their arms, stomach and legs. Similarly, whilst the majority of Australian girls reported that they were most satisfied with their muscles (than any other part of their body), many Australian girls also articulated modification of their muscles (either increase tone or decrease muscle bulk). Australian girls generally described an ideal body that was similar with minor changes such as a small reduction in weight or less muscle in a certain area. These descriptions were more implicit than those observed with the Fijian girls.

- R I am not too flabby or anything like that and I'm kind of toned because I go to the gym a bit so.
- I And what's your ideal body size or figure?
- R Um, (pause) (uncertain). I don't know.
- I Is it the same as your figure at the moment?
- R A bit toner, a bit smaller I guess. (AUS Ainsley, 16 years, BMI = 21.8)

It is possible that Australian girls prefer to discuss their dissatisfaction with their body in terms of specific body parts rather than calling themselves 'fat' or 'big' as was observed with the Fijian girls. These results are consistent with the findings described earlier whereby compared to Fijian girls, Australian girls are more likely to view the female body in terms of specific body parts such as weight and size.

These findings indicate that both cultural groups experience some level of body dissatisfaction. Whilst the Australian girls in the current study did not explicitly report body dissatisfaction, the fact that they were dissatisfied with certain body parts likely indicates a dimension of dissatisfaction among this cultural group. One possibility is that compared to Fijian girls, Australian girls are more implicit in their descriptions of their body image concerns. On the other hand, Fijian girls are more explicitly negative in descriptions of their own body. These findings are consistent with more recent research that has suggested an increase in the body image concerns among Pacific women (Becker, 1995; Becker et al., 2002; Brewis et al., 1998;). However, this is the first study to suggest that these body image concerns may be higher than those observed among Western girls. Clearly a larger and more representative survey is required to assess this more fully.

Preference for thinness

Previous research with Western girls has indicated that the preference for thinness is the main perception that constitutes body dissatisfaction (Phelps et al., 1993). However, results from an interview study conducted by Tiggemann et al. (2000) indicated that adolescent girls said that wishing to be thinner did not necessarily mean that they were dissatisfied with their bodies. The results from the current study indicated that both Fijian and Australian girls indicated a preference for thinness and an ideal body that was smaller than their current body. However, for Australian girls, this was not always associated with body dissatisfaction given that in the main, the Australian girls were happy with their body.

Moreover, whilst Australian girls preferred a reduction in size, this group articulated concern with the appearance of a very thin body size. Australian girls emphasized that they did not want a large reduction that resembled extreme thinness or was a 'stick' figure, or exposed 'ribs' and 'bones'. None of the Fijian girls, on the other hand, specified these same concerns.

And you look gross if you're really really skinny and you wear stuff and gross cos all your bones stick out. It's like ew. (AUS Mikayla, 15 years, BMI = 21.7)

The preference for thinness expressed by both groups is consistent with previous research mainly with Western populations (Graham, Eich, Kephart, & Peterson, 2000; Phelps et al., 1993). These results suggest that there has been a shift in the body image attitudes maintained by Fijian girls to more closely resemble those of their Western counterparts. It is possible that the presence of Western based media in Fijian society has fuelled these more negative body perceptions. For Australian girls, however, an emphasis was placed on avoiding extreme thinness. Perhaps Australian girls, as articulated by one girl, recognize the unrealistic nature of those messages that portray such a small body that for most girls is unachievable.

Yeh well they show you like really skinny girls and things and you are like ohh she is so skinny I wish I

was like her but like it is so unrealistic anyway. (AUS Ainsley, 16 years, BMI = 21.8)

Concern with weight gain and avoidance of a large body size

Another theme that emerged, which was also related to the preference for thinness, was the avoidance of a large body size. Both Australian and Fijian girls preferred to maintain a smaller body size due to concerns associated with weight gain or being 'fat'. These concerns included getting teased and criticized, loss of mobility (or the inability to engage in regular activities) and poorer health outcomes. In terms of health outcomes, more Australian girls than Fijian girls linked an increase in their weight with poorer health outcomes. For example, one-half of the Australian girls mentioned that if they were to gain weight they would become 'unhealthy'. Similarly, three Fijian girls reported that they would be at increased risk of 'obesity', 'heart attack' and 'dying' if they were to gain weight.

- I "And what do you think the consequences of being overweight are?
- R Consequences, um, probably unhealthy, and you might get sick, when you are older like, maybe heart attacks, you might get a heart attack when you are older, I think. (AUS Georgia, 15 years, BMI = 29.2)
- I "If you were heavier or bigger than what you are right now, would it worry you?
- R Yes. It might lead to heart attack and other diseases that can affect us. (FJ Savaira, 13 years, BMI = 27.2)

This association between poorer health outcomes and elevated weight status expressed by Australian girls could indicate an increased awareness of media messages and television programs such as 'The Biggest Loser', that target obesity and promote a healthy and 'normal' body weight. Whilst obesity is also a problem in Pacific nations, including Fiji, the media coverage and health initiatives aimed at targeting the problem does not appear at this stage to be as widespread as observed in Australia.

The other two concerns associated with weight gain expressed by both cultural groups were centered on a fear of insults and a loss of mobility.

R (to gain weight) Oh, just you get the teasing and all of that and it's like just, being paid out about your weight It would probably be unhealthy and maybe a bit like, restrictive of doing some things.

- I And what about if you weighed less than you do now, would that bother you?
- R No I wouldn't mind that (AUS Hayley, 16 years, BMI = 24.2)
- I If you were bigger or heavier then you are right now, will you worry about it?
- R Yes because some people tease me ... (they call us) fatty, because when I'm skinny they call me skinny and when I am fat they call me fatty. That's why I don't want to be fat. (FJ Sera, 14 years, BMI = 17.7)

Several studies with Western groups have indicated that a large body size is associated with laziness, lower intellectual capacity, ugliness (Stunkard & Sobal, 1995), weakness of will and lack of control (Grogan & Richards, 2002). Therefore, it is possible that Australian girls fear being perceived by others as lazy, unintelligent or ugly.

Insults and negative discourse have been reported as characteristic in traditional Fijian culture whereby public criticism of overly large bodies was reflective of laziness or inability to work and overly small bodies indicated poor level of care (Becker, 1995). Therefore, for Fijian girls, it is possible that the avoidance of a large body size is associated with the absence of laziness and will hence deflect public criticism.

Functionality versus aesthetic appeal

Australian girls were much more likely than Fijian girls to focus on the appearance and aesthetic appeal of their body and the female body in general. For example, maintaining a thin and toned body was associated with fashion and looks whereby girls felt that gaining weight would mean the inability to "wear nice clothes", wanting to "cover up" and worrying about "your tummy sticking out". Australian girls also associated muscle tone, with more favorable aesthetic appeal and strength. One Australian girl also believed that increasing her muscle tone would facilitate weight loss.

- I Do you go to the gym to change your weight, size or shape?
- R All of them mostly ... well I want to get toned and I just want to lose a bit of weight. (AUS Ainsley, 16 years, BMI = 21.9)

Fijian girls, on the other hand, were much more likely to perceive their body, or the female body in general, in terms of its functionality. For example, Fijian girls focused on the body's ability to work, play and be 'lively' or avoid laziness. I How will it affect our body if we don't eat well? R Most of the time we'll feel lazy and lack of energy. (FJ Foela, 17 years, BMI = 19.3)

Fijian girls associated female muscle with athleticism (either that it looked athletic or enabled the girls to engage in athletic activities), strength and masculinity. However, they also described the development or maintenance of muscles as necessary mainly for men or for those who needed strength for athletic or work purposes.

- I What about Makelesi Bulikiobo [athlete], do you like her muscles?
- R I think it matches her because she's a sportswoman. it's good only for like athletes and all those people who do model, but for normal person, no. (FJ Savaira, 13 years, BMI = 27.2)

None of the Fijian girls mentioned muscles in relation to weight loss or toning for aesthetic purposes.

Consistent with earlier discussions, it is possible that Fijians' tendency to view the body in terms of its function is symptomatic of a broader belief that the increased functionality of an individual's body (e.g. strength and ability to work) is of substantial value to a community. The absence of strong cultural values that emphasize the functional benefits of certain physiques may explain the absence of these attributes observed in the current Australian sample. However, the focus on appearance for Australian girls is consistent with previous research that associates an ideal body and social benefits with aesthetic qualities, including thinness (Dittmar et al., 2000; Paxton et al., 2005).

Relationship between BMI and body image

One of the driving forces behind the current study was the increasing prevalence of overweight and obesity among both Pacific and Western women. In fact around one third of the current sample of adolescent girls were overweight. However, an examination of the responses among normal weight, overweight and obese participants, indicated that elevated weight status was not associated with a preference for thinness, negative body perceptions or body dissatisfaction. Girls with higher BMIs had a preference to be thinner and valued the appeal of a slim body, however, as described in earlier sections (e.g. preference to be thinner), these same attributes were also endorsed among the thinner girls.

This finding is consistent with previous research with women, which has highlighted that body image concerns

are present among both normal weight (Brewis et al., 1998; Rolland, Farnill, & Griffith, 1996; Wilkinson et al., 1994) and overweight (Attie & Brooks-Gunn, 1989; Becker et al., 2005; Blowers, Loxton, Grady-Flesser, Occhipinti, & Dawe, 2003) adolescent girls. It is concerning that some Australian girls who were overweight or obese expressed higher levels of body satisfaction. This finding was not observed among the overweight or obese Fijian girls.

- I And which one out of those (weight, size, shape, muscles and height) would you be the most satisfied with for yourself?
- R Probably weight. (AUS Joanne, 15 years, BMI = 24)

Whilst these attitudes may be protective of body image concerns, it is possible that a large body size is more acceptable among some Australian girls than has been observed in the past. This may be important to consider in the development of obesity interventions whereby those overweight girls may not feel overweight, or may not be concerned with their overweight, and therefore be resistant to weight modification. Hence, even where girls acknowledge that they do not fit the ideal, it may not necessarily mean that size and body image are a key concern for them. This suggestion is further emphasized by the tendency for Australian girls in the current sample, to be less driven towards thinness than has been indicated in previous studies (Adams et al., 2000; Graham et al., 2000). As a result, health professionals may need to exercise caution in assuming that Australian girls all share the same concerns about health matters and afford them the same priority.

General discussion and conclusions

This study was designed to examine the range of body image concerns experienced by indigenous Fijian and European Australian adolescent girls. Specifically examined were the cross-cultural similarities and differences across the two groups of girls. Results from the current study indicated that compared to the Fijian girls, the Australian girls were more able to deconstruct the female body and provide more detailed descriptions of specific ideal weights, sizes, shape and muscles. Fijian girls, on the other hand, were unable to conceptualize the female body in terms of weight and size. However, despite these differences in the range of body image attitudes familiar to each cultural group, results indicated that the attributes associated with an ideal female body were similar for each group. Both groups deviated from the ideal body attributes valued in their culture to emphasize a preference for an average sized, fit and curvaceous body. This finding provides further evidence for a reduction in the cultural gap in the body image maintained by Australian and Fijian girls (Becker et al., 2002).

Despite the above similarities there were several differences that emerged between the two groups. Results indicated that Fijian girls expressed the value of body muscle in terms of its physical functionality. These results suggest that those traditional Fijian values that place an emphasis on the physical attributes of a female body continue to influence the way Fijian girls feel about their own body. For Australian girls, muscle tone was preferred for its aesthetic appeal rather than its strength. These findings add to existing research that has linked a growing preference for muscle tone as part of the ideal female body among Western adolescent girls (Saling, 2003).

Body image concerns, including body dissatisfaction, preference for thinness and avoidance of weight gain, emerged as a main theme for both groups. Whilst both Australian and Fijian girls were dissatisfied with at least some aspects of their body, for the most part, Fijian girls were more explicitly negative and critical of their body in general than Australian girls. Both Australian and Fijian girls articulated a preference for thinness, although Australian girls emphasized that extreme thinness was not favorable. Furthermore, both Australian and Fijian girls indicated that they wanted to avoid weight gain given the corresponding health consequences, increased teasing and criticism and loss of physical mobility.

The influx of modernization on Fijian culture could possibly explain Fijian girls' body image attitudes including body dissatisfaction and desire to be thinner. These results are consistent with previous research, particularly Becker et al.'s (2002) study that indicated increased body image concerns and behavior associated with the introduction of Western based television. Whilst it is possible that some of these body image attitudes such as body dissatisfaction and the desire to be thinner may reduce or prevent overweight, it has been demonstrated that they can also lead to problem eating and eating disorders among Western girls (Attie & Brooks-Gunn, 1989; Stice, Mazotti, Krebs, & Martin, 1998; Van den Berg et al., 2002) and Fijian (Becker et al., 2002, 2005; Becker, 2004) females. Therefore, for Fijian girls, it is important to create an awareness of the negative impact associated with body image concerns and the health risks associated with emulating an unrealistic body size.

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Interestingly, body image concerns appeared to be less salient for Australian girls than Fijian girls. Whilst there is still a preference for a smaller size among Australian girls, they appeared to be taking on board the unachievable nature of extreme thinness, the negative impact of a large body form and were becoming more accepting of their own bodies. As pointed out by Tiggemann et al. (2000), these findings go against the assumptions made by most body image researchers that the preference for a smaller body is indicative of body dissatisfaction. Again, these findings need to be verified in a larger study with a more representative sample. Although many Australian girls would welcome a weight reduction, these girls did not endorse thinness per se. It is possible that Western girls are becoming desensitized to the thin ideal, which could pose a risk of creating a greater acceptance of overweight. However, the Australian girls in the current sample seemed aware of the health hazards associated with an elevated weight status that would potentially protect them from future weight gain.

The dilemma, however, is understanding why a shift in cultural values that incorporate the preference for a smaller body size has not resulted in a corresponding reduction in obesity prevalence rates among Fijian or Australian females. In the current study, both overweight and normal weight girls expressed a desire to be thinner. Clearly, the direction of the association between BMI and body image concerns warrants further attention. Future studies are needed to assess whether for Fijian girls, the ongoing adoption of Western ideals that promote thinness has resulted in weight loss behaviors which include skipping meals, fasting and caloric restriction for some girls whilst for others traditional influences are more salient and have resulted in increased caloric consumption by eating and overeating. The social significance attached to food in traditional Fijian culture would partly explain their tendency to adopt the latter method (Becker, 1995). It is also possible that environmental factors conducive to obesity and associated with modernization, such as fast-food, are more influential for girls in both cultures than the desire to be thinner. Longitudinal studies are needed to better ascertain whether those normal weight girls with body image concerns become overweight and whether feeling overweight and wanting to be thinner contributes to overeating and weight gain or protects them from gaining weight.

In summary, whilst the range of body image attitudes is different between the two cultural groups, the ideal female body appears similar and multidimensional, incorporating a thin, toned and curvaceous female body as the ideal. For Fijian girls, body dissatisfaction was observed among the majority of this sample and both groups articulated a desire to reduce their overall size. Fijian girls further emphasized the physical role of body muscle whereas Australian girls were more focused on the aesthetic appeal associated with muscle tone.

The focus of the current study was to identify the main themes associated with body image among a small sample of Australian and Fijian adolescent girls, rather than to generalize findings to a larger sample. Another limitation present in most research that involves interviews is that girls answer questions in a socially desirable manner (Shaughnessy & Zechmeister, 1997) and interviewers often vary the wording of questions (and also use different prompting questions depending on the answer to the primary question). However, given that the interviews were conducted privately (and hence were not subject to peer evaluation) coupled with the fact that many girls were not privy to the main aims of the interviews serves to minimize any effects of social desirability.

Overall, the body image attitudes identified among Fijian and Australian girls provide a basis for further research using survey methods. Based on the findings in the current study, future researchers need to focus more on a range of body image attitudes, particularly for Australian girls and understand the limitations associated with using Western based measures for Fijian samples that are more inclined to focus on those aspects of the body, such as weight, that are relevant to these samples. This study further emphasizes the importance of including muscles in future body image research with all girls. In addition, future research could further examine the relationship between socio-economic status and body image attitudes. For example, body image attitudes and obesity levels have been shown to be associated with socio-economic status in different cultural groups (Brown and Konner, 1987). Furthermore, given the body image concerns expressed by both cultural groups, it is important to consider ways to promote a more positive body image among adolescent girls and the health risks associated with trying to emulate body ideals that are unachievable. This message may be slowly infiltrating the body image attitudes maintained by Australian girls. However, promoting a healthy body image among Fijian girls is important to prevent the onset of poor eating habits associated with body dissatisfaction and the desire to be thin.

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