

## Female and Male Adolescents' Interpretations of Body Imagery : Implications for School Programs

### Abstract

The purpose of this paper is to report on a study that investigated females' and males' interpretations of body imagery in magazines and other visual media. Forty 15 year olds, 20 females and 20 males, were selected for the study. Participants were required to complete 2 tasks that involved interpreting 2 sets of 10 images of visual representations of bodies. The affective responses of males and females differed in a number of ways. The males responses suggested that they objectified images of female bodies and were uncomfortable with images of male bodies, unless in a sports context. The females' affective responses suggested that they looked for personal meaning in the images and sought to identify themselves with some images. In terms of cognitive responses, a majority of the participants demonstrated sufficient knowledge of the associations of body imagery, particularly imagery that associates health or health-related products with slenderness and physical attractiveness, in order to decipher the messages a range of images and advertisements presented to them. Nonetheless, it is suggested that there is a role for school programs, drawing on the Health and Physical education Statement and Profile, to provide young people with the skills and information required to make critical appraisals of media representations of bodies. It is proposed that programs for male adolescents foreground a better understanding of their affective responses to body imagery, while a critical consumer focus might be foregrounded for females.

David Kirk  
Department of Human Movement Studies  
The University of Queensland  
Brisbane 4072

Email: [kirky@hms01.hms.uq.oz.au](mailto:kirky@hms01.hms.uq.oz.au)  
Phone: 07 3365 6989

Paper presented to the Annual Conference of the Australian Association for Research in Education, Hobart, 27-31 November 1995.

## Female and Male Adolescents' Interpretations of Body Imagery : Implications for School Programs<sup>1</sup>

### Introduction

It is now widely acknowledged that in most post-industrial societies young people's exposure to visual media has increased substantially in the past two decades (Fiske, 1987), a development that has stimulated considerable debate over the effects of all forms of visual media on a range of social behaviours, cognitive and affective development

(Aronowitz & Giroux, 1985; Postman, 1985; Winn, 1977). In train with these developments, the relationship between sport and visual media has changed. The ongoing commercialisation of sport and technological developments such as satellite and cable television have begun to alter the form and content of sports contests and the experience of the spectator viewing these contests (Gruneau, 1988; McKay & Rowe, 1987; Morse, 1983). A related development has been the increasing prominence of sporting and exercising bodies in visual media, often in the form of advertising and other commercial and promotional activities. While researchers have begun critical analyses of the uses of such body imagery (eg. McKay, in press), few researchers have addressed the ways in which visual representations of bodies are understood by the viewers of such images.

Adolescents have been identified as a key group of consumers of popular culture, and their frequent engagements with visual and other media are significant in the formation of self-identity (Stratton, 1992; Johnson, 1984; Carey & Lette, 1979). By adolescence, most individuals have already acquired a considerable range of physical competencies and a high level of awareness of what are considered to be acceptable, normal bodily activities. For many adolescents, the dramatic changes wrought by the onset of puberty may be sufficient to destabilise well established and sedimented notions of physical normality. Adolescence is a period in the lifecycle in which there is acute awareness of the body as a dimension of self-identity.

The focus of this paper is female and male adolescents' interpretations of the social significance of bodies and the implications of this analysis for school programs. The paper reports the findings of a study that investigated affective and cognitive dimensions of adolescents' interpretations of a series of images of bodies in sport, exercise and advertising contexts. The study was particularly concerned to discover the sense these young people make of body imagery. The investigation of these interpretations may provide insights into the construction of gendered self-identity and gender differences in interpretations of the

body in contemporary consumer culture. The first part of the paper reviews the literature on the gendered body in consumer culture, and outlines the theoretical approach to understanding images and advertising that informed the design of the study. The second part of the paper overviews the study design and research methods. In the third section, an interpretation is presented of the participants' responses. In the final section of the paper, the implications of the study for school programs are examined, focusing on how the Statement and Profile in Health and Physical Education might be used to frame programs.

### The Gendered Body in Consumer Culture

The body has emerged as a key topic of interest for social scientists in the last decade (Frank, 1990), and increasingly for researchers in the fields of physical education, exercise, leisure and sport (Shilling, 1991; Theberge, 1991; Heaven & Rowe, 1990; Heinemann, 1980). This interest reflects the increasing visibility of bodies within the media of western societies during this period, particularly through media sport and advertising. As Shilling (1993) has suggested, the prominence of bodies in all forms of visual media is predicated on a shift in understanding that bodies are generators as well as receptors of social meanings and relationships. Rothfield (1986) points out that the renaissance view of bodies as natural objects has tended to make it difficult to think about bodies in other ways, especially in terms of the relationships of the body to social and cultural processes. This relatively recent shift in understanding has resulted in a view of bodies as socially constructed, as existing in culture as well as in

nature (Kirk, 1993).

All bodies signify in all aspects of everyday life. A good example of this process of signification is the values that are associated with various body shapes and sizes. Researchers interested in body-size dissatisfaction have shown that the social consequences of perceiving oneself to be overweight impacts negatively on feelings of self-esteem and can contribute to eating disorders, particularly among women (Tiggeman & Pennington, 1990). Bodies are socially constructed through processes of learning and interaction, so that acceptable facial and other physical gestures, comportment, body adornment and decoration and a host of other physical acts, as these are defined by particular groups and communities, are appropriated for use in everyday interaction (Mauss, 1973). Children learn about their bodies and their capabilities in both physical and social environments, in relation to objects and other people. Bodies are the practical mode of engagement with a range of external events and situations, and it is through relentless and continuous monitoring of bodies and their expressive capabilities that individuals successfully engage in social activity (Giddens, 1991).

In consumption-driven societies, the everyday signifying processes in which bodies play a central part take on new associations through the commodification of bodies (Fitzclarence, 1990). The social consequences of body commodification take at least two forms, both of which objectify bodies. The first form incorporates bodies within the cycle of consumption, involving an increased concern for what Featherstone (1982) calls body maintenance, where bodies "require servicing, regular care and attention to preserve maximum efficiency"(p. 24). In this respect, bodies become a site of consumption in themselves, particularly of the services of the beauty, cosmetics, clothing, exercise and leisure industries. This process has led, in Shilling's (1993) terms, to an increasingly widespread view of the body as an unfinished individual project that can be pursued to some kind of resolution according to the lifestyle choices people make. In the second form, bodies are a focal point of the commercial process, and the everyday signifying properties of bodies are re-articulated to make new associations with particular commercial products. Bodies are used to sell products by linking these products to particular significations, such as linking mesomorphic slenderness as a symbol of fitness, health and social success to a product such as low fat milk.

For some time sociologists have been investigating effects of media representations of bodies as they appear in sport and exercise settings. A prominent line of research has investigated how mass media images reinforce stereotypical notions of femininity and masculinity, often in ways that are oppressive for most women and some men. Greendorfer (1991) has shown that female bodies are most likely to be portrayed as inactive, and women's performance subjected to sexist commentary. Through her analysis of women's Olympic gymnastics, Wright (1990) demonstrates that cultural norms demand that female gymnasts display feminine qualities of grace, flow, dramatic expression and rhythm and physical attractiveness consistent with notions of women as sexual objects, while their sport demands of them strength, power, speed, courage and aggression. Focusing specifically on television, Morse (1983) has explored the consequences of changing representations of sport in ways that enhance the speed, power and physical prowess of male bodies. She suggests that the commodification and visual representation of the sporting body is "associated with a limited and stereotype view of masculinity" (p.61).

In a study of photographs in Sports Illustrated for Kids, Duncan &

Sayaovong (1990) have noted that "photographs do not simply create images of women or girls, men or boys; they construct differences between females and males and address readers as though the differences were natural and real" (p. 93). They note that female athletes appear in only a small percentage of photographs in this magazine and that in the few categories where female athletes outnumber males, they are typically shown in individual and aesthetic roles that contrast

markedly with males' association with team sports and power activities. More recent developments in this line of research, most notably by McKay and his colleagues, have employed semiotic techniques to show how media representations of the 'new' sporting women have worked to contain women's activities within permissible space (McKay, 1995), to examine the relationships between representations of black sportsmen and 'enlightened racism' (McKay, 1994a), how everyday representations of sport naturalise male power (McKay, 1994b), and how corporatism and nationalism are linked and promoted in and through sport (McKay & Huber, 1988).

While this research has provided invaluable data on the ways in which various forms of visual media contribute to the social construction and particularly the gendering of bodies, sociologists of sport and exercise have paid less attention to how the messages communicated through media representations are understood and appropriated by young people. Adolescent media use is a well researched topic in the fields of youth studies, communication and education (O'Kelly, 1993; Sachs, Smith & Chant, 1991; Bisnette, 1990; Karmatz, 1985), though none of this research has been concerned specifically with media representations of bodies. Sport and exercise psychologists have investigated the relationships between physical self-perception, physical activity choice and exercise adherence (eg. Fox & Corbin, 1992), while there has been a productive line of research pursued by psychologists interested in interpretations of physical appearance (Harris, Harris & Bochner, 1982), including interpretations of body shape and size (Huon, Morris & Brown, 1990). In one of the few studies of young people's interpretations of physical appearance in a physical education setting, Melville & Maddalozzo (1988) demonstrated that students' interpretations of obesity in a physical education teacher affected detrimentally their learning of exercise concepts.

However, with only a few exceptions, sociologists of sport and exercise have tended to pay little attention to the ways in which the viewers of visual representations of bodies interpret these images, especially in the case of advertising that utilises images of sporting and exercising bodies and in the process commodifies bodies. Part of the reason for this neglect lies in researchers' understanding of the subject matter of their disciplines, with sociologists inclined to leave individual interpretations to psychologists, and psychologists in turn inclined to leave to sociologists analyses of the social contexts in which interpretations take place. Another factor lies in the considerable theoretical difficulties associated with investigating the interfaces between culture and individual interpretations. As an example of this situation, Andrews & Loy (1993) have argued with respect to the influential cultural studies tradition emanating from Britain that a culturalist approach to the social construction of bodies has "failed to address exactly how the metaphysical realm of subjective consciousness is connected to the material actuality of bodily existence". They propose that "the link between consciousness and

corporeality can best be bridged by the concept of affect; with reference to those specific feelings and emotions that are engendered by the subjective articulation of particular texts and practices" (p. 270).

### Understanding Body Imagery in Consumer Culture

This paper builds on the proposal by Andrews & Loy to investigate the affective and cognitive dimensions of the interpretations of a group of female and male adolescents to a series of images of bodies in sport, exercise and advertising. Unlike most other sociological approaches to understanding the effects of visual images of bodies, where the decoding of the image is undertaken by the researcher, the focus of this paper is on the sense young people make of body imagery. A key premise underlying this investigation is that young people's responses to an image will provide some information on how they see themselves in relation to body imagery, and so may provide some glimpses of their embodied gendered self-identities as these are formed in relation to the products of popular physical culture.

Gill (1979) argues that in consumption-driven societies, a person's sense of self in relation to society is only possible through the continuous activity of self-determination, of the making of choices and decisions. The individual is compelled into active self-formation by a lack of fixed traditional roles, and the acts of acquiring, consuming and throwing away are at the centre of a complex process of self-definition. Advertising is crucially placed to give substance to this process of self-determination, since it stimulates desire and offers apparent alternative personae and lifestyles from which to choose.

Johnson (1984) reinforces this point in the comment that "the consumption of goods is about the production of meanings, the production of signs of difference and hence social identity for the consumer. Through taste, choice of goods, (and) selection of items from the commercial culture(,) we seek to mark ourselves off from others" (p. 19). Johnson affirms that the material the media supplies is not passively absorbed, but is actively appropriated as the stuff of people's sense of self, their place in the social world, the bases of their hopes and expectations of the future, and as a means of expressing their own experiences. Media in consumer culture thus plays a crucial role in the formation of subjectivity, of people's sense of themselves. Since the body in consumer culture is the material manifestation of self, then visual representations of the body offer crucially important resources in the process of self production. Advertising in particular not only establishes bodily norms, it also stimulates desire around these norms for the ways of life the body is being used to signify.

According to Williamson (1978), advertisements do ideological work at a submerged or implicit level through the association and linking of otherwise unrelated ideas. Advertisements create structures of meaning and they achieve this through their more obvious function to sell products. Advertisements reassemble or reconstruct already existing structures of meaning, and build on sedimented, cumulative chains of signification (Hall, 1985). These chains are comprised of series of already meaningful elements that are attached to other already meaningful elements to create new discursive formations.

Williamson notes that while it is possible for individuals to interpret an advertisement differently, she claims that if the advertisement is to work (ie. to be effective at selling products), then it must be understood in a particular way. Although it is important to highlight slippage in decoding representations and the possibility of multiple interpretations, it is equally important not to slide into relativism, randomness and arbitrariness. As Hall (1985) suggests, signifying practices are always relatively anchored. Consistent with Williamson's

position, Cowie (1977, p.22) argues that while many readings of an image are theoretically possible, "in practice the image is always held, constrained in its production of meaning or else becomes meaningless, unreadable". According to Williamson, the image is a puzzle that requires to be deciphered before it can be understood; "although absence in advertisements requires us to fill something in, and jokes or puzzles require us to decipher and think, these hermeneutic processes are clearly not free but restricted to carefully defined channels provided by the ad for its own decipherment. A puzzle has only one solution. A missing piece in a jig-saw has only one shape; defined by its contingent pieces" (Williamson, 1978, p.21).

The creators of advertisements attempt to reduce the possibility of a reader misunderstanding their (the creator's) intentions by targeting the advertisement at specific groups of readers. Moreover, for advertisements to work, it is important that they are not believed literally (eg. 'Persil Washes Whiter'; 'Coke Is The Real Thing!'). They work instead at the level of the signifier, at the nexus of associations of already established structures of meaning. At this point, as Cowie (1977, p.22) notes, "the concept of anchorage is important; there are developed in every society decisive technologies intended to fix the floating chains of signifieds so as to control the terror of uncertain signs".<sup>2</sup>

## The Study

A key purpose of the study, informed by this theoretical perspective, is to identify three factors underpinning affective and cognitive dimensions of adolescents' interpretations of body imagery: first,

whether the images are comprehensible to them and the extent to which they are part of the target group of readers 'hailed' by an image; second, how adolescents interpret selected images of bodies in terms of the associations these images create for them; and third, how they see themselves in relation to an image, in terms of identification and personalisation.

The study was designed to investigate these affective and cognitive dimensions of females' and males' responses to images of bodies in sport, exercise and advertising settings. This study was part of a larger project investigating the ways in which adolescents' experiences of school physical education are mediated by selected dimensions of popular physical culture. Forty 15 year olds, 20 females and 20 males, were selected from a pool of 1200 11 to 18 year old in 5 schools participating in the study. The participants had previously completed a questionnaire concerned with physical activity patterns and leisure time pursuits that had been administered to all 1200 participants in the larger project. They had also been members of physical education classes observed by the research team on at least 10 occasions, and had been interviewed at least once in a small group setting with peers. A total of 100 lessons were observed and approximately 150 students interviewed. Schools were carefully selected to represent the range of socioeconomic levels and the ethnic and gender compositions of the population as a whole.

### Procedures

Students were interviewed in their schools in groups of 4 to 6 during recess or physical education class time depending on school arrangements. The structured interviews consisted of 2 tasks, each of which required individual written responses from students on a pre-prepared response form. In each interview, students were seated

facing a screen or white board and images were projected by a slide projector controlled by a researcher. The images were shown in the same sequence for each interview. Each interview took approximately 30 minutes to complete. In the case of both tasks, 2 preview images were shown to students as the procedures and tasks were explained.

### Task Materials

Twenty images were selected that portrayed a range of female and male body shapes and sizes. Sources of these images were predominately magazines and other media on public display (eg. billboard advertising) identified through the survey and group interviews at an earlier stage in the larger project to be widely used by or accessible to young people in the age group. In task 1, 10 images representing a range of shapes and sizes of bodies were shown to students within a variety of contexts. In task 2, 9 images were shown that utilised various shapes

and sizes of bodies in advertisements to sell diet foods, beauty products, cigarettes, a weight loss program and tampons. One further image (9) was shown in task 2 that was not an advertisement, and was intended to confirm that participants could discriminate between body imagery in advertising and other uses of body imagery.

#### Task 1

Task 1 was an association task in which students were asked to respond to how each of the images 'make you feel', and so was intended to identify students' interpretations at an emotional level. Each image was projected onto the screen for 5 seconds and then the screen became blank for a further 5 seconds while students completed the task, which was to 'write down the first word that comes into your mind'. Ten images of bodies were shown in succession following this procedure. The following 10 images were shown in sequence to students:

1. A well known female fashion model in swimwear on the cover of a magazine.
2. A female body-builder in competition pose.
3. A male body-builder in competition pose.
4. A slender female in swimwear in an article promoting diet products with the text: How to make that diet work.
5. A male weight-lifter in competition.
6. A group of female middle distance track runners in mid-race.
7. The naked upper body minus the head of muscular male curling a barbell with the text: No pain, no gain.
8. A female water-skiing in swimwear.
9. One female and one male modelling knitwear.
10. Before and after pictures of a fully clothed female in an article promoting dieting with the text: Gail Heggie - half the woman she was.

#### Task 2

Task 2 was intended to identify students' responses at cognitive and affective levels by testing students' understanding of advertisements that associated various shapes and sizes of bodies with particular products, as well as how they felt about these associations. Students were shown each image for 60 seconds, during which time they had to respond to 3 questions: 'what is the message of this advertisement?', 'do you think it is a good advertisement, why/ why not?' and 'how do you feel about the message of this advertisement?'. In the case of each image (apart from image 9 of a 1970s-style female disco dancer), there was some text that participants could read clearly. The following 10 images were shown in sequence to students:

1. An advertisement for a weight loss program showing before and after images of a woman in swimwear with the text: Gloria's weight loss

promise.

2. An advertisement for low fat yoghurt showing the waist and upper

thighs of a slender woman in swimwear, with a carton of yoghurt in the centre of the image with the text: The low fat yoghurt that doesn't taste low fat.

3. An advertisement for a beef extract drink showing a glamorous female model fully clothed holding a cup and saucer and flanked by two muscular males clothed only in shorts with the text: Are you a Bovril body?.

4. An advertisement for calcium enriched, low fat milk showing a relatively tall, slender female model in briefs and vest standing on scales with the text: How to lose weight without losing height.

5. An advertisement for a range of beauty creams and lotions juxtaposing a slender female model in a white bikini with a painting by Rembrandt of the side and rear view of two naked women, accompanied by the text: It seems few of us share the old masters' admiration for fat bottomed girls.

6. An advertisement for low fat cheese showing a slender woman in a leotard with the text: Bega super slims.

7. An image on the cover page of a fashion magazine for men showing the naked upper body of a male model holding his naked baby son.

8. An advertisement for cigarettes showing the slender midriff of a woman clothed in colourful flowing material and holding a cigarette.

9. An image of a 1970s-style female disco dancer clothed in a silver body suit.

10. An advertisement for tampons showing a slender woman clothed in a leotard and tights playing netball.

#### Analysis - Task 1

Student responses to task 1 were coded as 'Group Z', 'Group Y' or 'Group X'. The literal written responses of students that we labelled Group Z included 'good figure', 'jealous', 'beautiful', 'sexy woman', 'good body', 'tough', 'fitness', 'energy', 'smart'. Student responses we labelled Group Y typically were descriptive and included 'muscle', 'woman', 'body', 'body-building', 'model', 'runners', 'exercise'. Student responses we labelled Group X included 'disgusting', 'yuk', 'ugly', 'gross', 'sick', 'filth', 'repulsive', 'pain', 'boring', 'show off'.

#### Analysis - Task 2

Coding student responses to the question 'what is the message of this advertisement?' required the researchers to identify a range of reasonable interpretations of the advertisement and then to make an assessment of whether an individual student's response fell within or outside this range. While the range of reasonable interpretations of an advertisement is always difficult to determine, it was assumed following Williamson (1978), Hall (1985), and Cowie (1977) that if the advertisement is to work then it must be understood in only a limited number of ways and anchored by a limited range of meaning. For most advertisements in task 2, participants had to understand the juxtapositioning of an image with text, usually a few words or one sentence. Responses were coded as 'within the range' and 'outside the

range' of reasonable interpretations.

Responses to the question 'do you think it is a good advertisement?' were coded yes or no, while the qualitative detail of the explanation in response to the linked question of 'why/ why not?' was noted. Responses to the question 'how do you feel about this advertisement?' were coded, in a similar form to task 1, as Group Z, Group Y or Group X, with the qualitative detail of the response noted.

## An Interpretation of Student Responses

### Task 1

Table 1 reveals that the largest number of Group Z responses was to image 4 of a slender female in swimwear in an article promoting a dietary product, and image 1 of a female fashion model in swimwear on the front page of a magazine. Image 10 of before and after pictures of a fully clothed female in an article promoting dieting attracted most Group X responses, followed by images 2 and 5, which were of a female body-builder and a male weight-lifter respectively. Image 3, of a male body-builder, ranked only slightly behind these two images in terms of Group X responses. However, some differences in this order can be observed in relation to students' sex.

Table 1 about here

Table 2 reveals that most female participants response to images 1 and 4 were Group Z, while images 2 and 3 attracted mostly Group X responses. There was a broad pattern of female's responses to the other six images. In contrast, most males' responses to images 1, 3, 4 and 11 were Group Z, and Group X to image 10. There were high numbers of Group X or Group Y responses to images 2, 5, 6 and 9. Image 4 elicited Group Z responses from more females than any other image, while there were more Group Z responses by males to image 1 than any other image. More dramatic differences can be observed in relation to Group X responses. More females recorded Group X responses to images 3 and 2 than any other images, representing a male and a female body-builder respectively, while more males recorded Group X responses to image 10, of a before and after pictures of a fully clothed female in an article promoting dieting.

Table 2 about here

The results of task 1 show that there were only two images, 1 and 4, to which a clear majority of females' and males' affective responses were Group Z. In both cases, young, slender and apparently healthy women are shown in swimwear. There were more Group Z responses from males than females to image 1, of a well known fashion model on the front cover of

a magazine. In comparison, when the image of a youthful, apparently healthy and slender female is set in the context of 'making that diet work', there were Group Z responses from slightly more females than males, with more Group Z responses from females to image 4 than to image 1. The words used most frequently by male participants in response to image 1 were 'sexy' and 'beautiful', whereas the females' responses were more wide ranging and included several responses of 'jealous', 'good figure', and 'perfect'. The words 'sexy' and 'beautiful' were used by half the males who responded to image 4, suggesting perhaps that the associations evoked by an image of a young, slender woman in swimwear relate predominately to heterosexual attractiveness. Image 4 evoked associations with health for some males and over half the female participants.

The marked contrast between female and male affective responses to images 2 and 3, of female and male body-builders, points to gender differences in the associations evoked by body imagery for each group. For over half the females, the musculature of the body-builders evoked Group X responses (using words such as 'disgusting' and 'repulsive'), suggesting that these were bodies that few of the females identified with or wished to emulate. Interestingly, there is little difference in female responses to the female and male bodies in images 2 and 3. In contrast, a majority of males provided Group Z responses to the male body-builder but fewer provided these responses to the female image.

This may suggest some identification on the part of males with the musculature of the male body-builder. The males' response to the female image perhaps suggest that the male participants in this study, in contrast to the females, associate this particular body shape more closely with masculinity than with femininity. Moreover, the image of the female body-builder may challenge a conventional, heterosexual view of feminine women as sexually attractive.

The Group X responses of males to image 10, the before and after pictures of a female dieter 'Gail Heggie', which contrasts with females' Group Y and Z responses, may offer support for the observation that the young men in this study, either due to their sexual orientation or as a response to heterosexual expectations among peers, tended to view female bodies as sexual objects. In the before picture, the woman is obese and appears side-on and fully clothed in a dress with floral print. In the after picture, she has clearly reduced her size by a considerable degree, and is shown as a relatively slender woman in close fitting clothes and skipping over a skipping rope. An accompanying caption reads 'Gail Heggie - half the woman she was'. This format of before and after contrasts of shape and size is common in weight control advertising, though it may be more familiar to females than males since most of this material appears in magazines targeted at females. It may have been the case that the males registered the before image of the woman in the short time available to them, even though the

after image is larger than the before, given their use of language ('fat', 'ugly'), whereas the females' language tended to refer to the message of the advertisement ('improvement', 'weight loss'). More generally, it might be argued that this result suggests that the males in this study tended, at an affective level and for whatever reason, to make a heterosexual association of images of female bodies with physical attractiveness.

It is interesting to note that while a majority of male response to the image of the male body builder were Group Z, there were more Group X responses from males than females to image 5 of a male weight-lifter in competition. The lifter is shown grimacing as he begins his lift, and it is the effort clearly expressed by bulging neck and face muscles that feature most frequently in the males' responses. Another common association with weight-lifting evident in the language used by both females and males was with the use of performance-enhancing drugs such as steroids. This example illustrates the specificity of associations attached to images of bodies, and cautions against generalising about the social symbolism of categories of body shape and size.

It is also evident from the differences in the patterns of female and male affective responses that some topics held greater appeal for one group or the other, indicating who it is the images are hailing. Image 9 of a female and a male modelling fashionable knitwear apparently held little interest for most males but attracted mainly Group Z or Y responses from females. The images that attracted the largest number of Group Z responses from males associated men with strength and well developed musculature, as in images 3 and 7 (though with the exception, previously mentioned, of image 5), or else displayed young, slender females in swimwear in a variety of settings, as in images 1, 4, and 8. The pattern of female responses indicates more Group Z responses to images 1 and 4 and Group X responses to images 2 and 3, with the rest tending towards Group Y. It might be suggested tentatively that the language used by males suggests that a heterosexual view of the physical attractiveness of female bodies and desirability of having a particular male body shape and size were the predominant associations made. The females made fewer judgments of physical attractiveness, their responses tending to display personal identification through the

associations the images invoked for them.

## Task 2

In relation to the first question in task 2, Table 3 shows that a majority of females' and males' interpretations of the message of image 3, in the view of the researchers, fell outside the range of reasonable readings, which was an advertisement for a beef extract drink. A similar result can be seen for image 4, an advertisement for calcium enriched, low fat milk, and for image 7 of the male model and child

advertising a magazine. Most participants recognised that image 9, of a female disco dancer, was not an advertisement (eg. stating that 'there is no message'), or else expressed confusion about the image and its message. A minority of participants who assumed the image did project some advertising message typically gave a descriptive response (such as 'dancer' or 'model') and suggested that the message related to dancing, dance wear or music.

Table 3 about here

Table 4 shows that, consistent with responses to question (a) in terms of the participants' interpretations of the message of each image in the context of what was being advertised, images 3, 4, 7 and 9 received Group X responses to question (b) 'do you think this is a good advertisement?' from a majority of females and males. Image 8, advertising cigarettes, received Group X responses from most males, while females responded more equivocally. In the case of image 5, an advertisement for beauty products juxtaposing a slender female model dressed in a bikini with a painting by Rembrandt of two naked women, a majority of females responses to this question were Group X, while males were split evenly in their responses. Similar proportions of females and males stated that images 1, 2, 6 and 10 were good advertisements, which is consistent with their interpretations of the advertisements reported in Table 3.

Table 4 about here

In contrast to the responses to task one reported in Tables 1 and 2, Table 5 reveals that participants were generally less equivocal in response to question (c) 'how do you feel about the message of these advertisements?', with fewer Group Y responses being recorded generally. Image 3 elicited Group X responses from all females and males. All female participants and most males recorded Group X responses to image 8. Slightly more females than males recorded Group X responses to image 4, with more males than females recording Group X responses to image 7. Image 9 attracted the largest number of Group Y responses.

Table 5 about here

Task 2 was intended to test the participants' interpretations of, as well as their affective responses to, a series of advertisements that utilised body imagery to sell a range of products. In contrast to task 1, task 2 was designed to elicit a more considered response from participants. A central purpose of the task in task 2 was to determine whether adolescents were able to decipher, in Williamson's (1978) terms, the puzzle presented by an advertisement, and so to identify the various chains of signification that were being articulated in and through the use of body imagery. The second and third parts of the task were intended to provide data that would allow a comparison to be made

between their comprehension of an advertisement and how they felt about its effectiveness, that in turn would provide some insights into how

they saw themselves in relation to the image and its message.

The results presented in Table 3 relating to the first question in task 2, 'what is the message of this advertisement', show that all of the participants were judged to have made within the range responses to six of the ten images. A majority of females and males recognised that image 9 was different from the other images in that there was no obvious product being sold through the image and that this was in all likelihood not an advertisement. The responses to this non-advertisement suggest that participants understood the requirements of the task and were able to distinguish advertisements from other imagery.

Within the range responses from all participants to the question for images 1, 2, 5, 6, 8 and 10 suggest that these advertisements had a form that was recognisable and familiar to this group of adolescents, and that they are reasonably skilled in deciphering advertising of this kind. For instance, in the case of image 2, an advertisement for low fat yoghurt showing the waist and upper thighs of a slender woman in swimwear, with a carton of yoghurt in the centre of the image and that had the text 'The low fat yoghurt that doesn't taste low fat', the common response was that 'this yoghurt tastes good and doesn't make you fat'. Within the range responses to image 8, an advertisement for cigarettes showing the slender midriff of a woman clothed in colourful flowing material holding a cigarette at her waist, included the comment that 'smoking is desirable because attractive, slender and healthy women do it'. In all cases of these within the range responses, the associations the images were intended to promote involved linking slender, attractive, active and apparently healthy women with a range of products.

Image 5 was an advertisement for a range of beauty creams and lotions juxtaposing a slender female model in a white bikini with a painting by Rembrandt of the side and rear view of two naked women, accompanied by the text: 'It seems few of us share the old masters' admiration for fat bottomed girls'. While all female and male participants recorded within the range responses to this advertisement, a majority of females thought that this was not a good advertisement, with an even number of males responding yes and no. Females who responded that this was not a good advertisement fell into two main categories, one being cynicism about the effectiveness of the product, and the other being disapproval of the message. A response characteristic of the first category was that 'no beauty product can make you look slim', while a response characteristic of the second category was 'no, it is making everybody think of how women should be rather than what they do look like'. Most males who thought this was not a good advertisement were cynical about

the effectiveness of the product, and some commented that the women in the painting were 'ugly' or 'disgusting', while more males than females who responded that it was a good advertisement thought that the contrasts between the images were humorous. A majority of female and male participants recorded Group X responses to the advertisement, with comments ranging from 'it doesn't tempt me' to 'boring', and the perceptive comment that 'it isn't selling the product, its selling women'.

Image 8, advertising cigarettes, elicited strong reactions from most males and all females. Many of the participants stated that such advertising should be banned because it conveyed a message that individuals could smoke and look good. The responses to this image provide some indication of the success of health promotion efforts to alert young people to the risks associated with smoking. The language used by participants, such as 'sick', 'stupid', 'revolting' and

'disgusting', suggest disapproval of the association of attractive or healthy body imagery with a patently unhealthy activity.

A high number of Group X and Group Y females' and males' responses were recorded for images for which most participants deciphered the message, associating slender female bodies with various products. However, the language used by the female participants differed significantly from that used by males. Frequent words and phrases in females' responses to all three questions in task 2 were 'envious', 'jealous', 'it makes me feel fat', 'I don't need to diet', 'she doesn't need to drink skinny milk', 'it makes me feel guilty'. This language may suggest that a common response by females to these advertisements involved personal identification, and that many of the female participants in the study felt that the messages of the advertisements were addressing them personally, even if the message itself was discounted or dismissed. Males frequently used words and phrases like 'boring', 'only for obese people', and 'uninteresting' that perhaps suggested they could not see themselves in these advertisements. Even though the males recorded within the range responses to many of these advertisements, suggesting that the associations being constructed were familiar and comprehensible to them, they clearly did not consider themselves to be part of the target audience of such messages.

A majority of participants were judged to have responded outside the range of reasonable interpretations of images 3, 4 and 7. The pattern of responses to the second and third parts of task 2 can be seen to be generally consistent with the participants' interpretations of images 3, 4 and 7. Image 3 was an advertisement for a beef extract drink showing a glamorous female model fully clothed holding a cup and saucer and flanked by two muscular males clothed only in shorts, with the text 'Are you a Bovril body?'. Only one male participant provided a within the range response because he recognised that the product was a beef

extract drink. Other participants thought that product was coffee or even, in a number of cases, chicken soup. Some participants stated they did not know what the advertisement was about. In the case of this advertisement, the message was rather more complex to decipher than the images to which the majority of participants registered within the range responses, even if participants knew what the product was. This is because the advertisers were attempting to disassociate their product from previous accumulated associations, possibly with male consumers and building muscle, by foregrounding the curvaceous, fully clothed body of a famous fashion model against two 'beef-cake' males. A new order is being suggested through this imagery, and the message is that beautiful women as well as strong masculine men can be Bovril bodies.

Even though most of the participants seemed to lack sufficient information about the product to decipher the advertisement, their responses to the second and third part of the task are illuminating. A majority of the male participants commented on the female at the centre of the image, with some stating that the males were irrelevant to the advertisement, one male commenting that 'they don't add anything'. In contrast, none of the females commented on the male figures alone, focusing instead on the 'good looks' or 'good bodies' of all three models. Some males also commented that the advertisement was sexist because the males were dressed in shorts only. The foregrounding of the female model in the centre of the image and in front of the males does suggest a reversal of power, a new order in the usual relationships between males and females in such advertising, and these juxtapositions may account for the responses of male participants who felt the advertisement was sexist. Moreover, a majority of females and males adopted a cynical attitude towards the advertisement, commenting that

more was needed than a cup of Bovril to look like these models, an attitude that was prevalent towards a majority of the products represented in the advertisements.

Image 4 was an advertisement for calcium enriched, low fat milk showing a relatively tall, slender female model in briefs and vest standing on scales, with the text 'How to lose weight without losing height', is a different case to image 3, since the message here drew heavily on participants' health knowledge. Some female and male students recorded within the range responses, though the majority showed in their responses that they did not see any point to the advertisement. Deciphering this advertisement required participants to understand that individuals who embark on a weight control program can upset the nutritional balance of their diet, and for women in particular who reduce their calcium intake, this can lead to a higher risk of osteoporosis. The juxtapositioning of the woman and the text encodes this information and makes the association with the product, calcium enriched, low fat milk. The woman's tall, slim figure is accentuated by

the camera angle, which is positioned somewhere below waist height, and by her revealing but everyday attire. Most participants did not make these connections between weight loss, 'height' and the product. Advertisers were assuming a level of health knowledge that a majority of this group of 15 year olds did not possess. Some participants who did not decipher this message in the advertisement were cynical about the possibility of the product 'making somebody slim'.

More females than males provided within the range responses to image 7, an image on the cover page of a fashion magazine for men showing the naked upper body of a male model holding his naked baby son, though a majority of participants answered incorrectly. One reasonable interpretation of the message of this advertisement is that the men who read this magazine are masculine and caring. One female commented that 'big macho guys care about little kids too'. The juxtapositioning of the strong, muscular father with his baby son, whose nakedness is intended to accentuate his vulnerability, presents an image that forges an association between being manly and capable at the same time of caring for an infant. Many participants who were judged to have made outside the range responses, such as 'it shows good looks run in families', 'he wants his son to be a model too', suggest that the articulation of masculinity and caring was not made by these participants<sup>4</sup>.

Females' and males' affective responses to the advertisement revealed interesting differences in terms of their uses of language to express how they felt about the message of the advertisement. For one male who was judged to have answered within the range with the response that the message was 'Read this, look good, because good looking men are compassionate', the advertisement was not good because the man 'looks gay, for poofers or vain people'. Another male believed that the message was 'we'll show you how to dress properly', and felt that the image would not appeal to a man because 'a man would rather see a semi-naked woman than a bloke'. In both cases, these males had recognised that the image was challenging traditional notions of masculinity that for these two participants may have been threatening. Indeed, the latter respondent commented that 'I would not read this (magazine) because I feel like too much of a conformist'. Another male commented that the advertisement did not work because it was meant to 'appeal to yuppies', and another that the image 'would appeal to females'. For their part, some females commented that they felt the image and its message 'is sweet', that 'it makes me clucky' and that 'it is beautiful and good to see'. Another female participant wrote that the message made her feel 'good, the cover is cute, but the

magazine is boring (I read it last month!).'

Implications for School Programs

It might be argued that a majority of the participants in this study have sufficient knowledge of the associations of body imagery, particularly imagery that associates health or health-related products with slenderness and physical attractiveness, in order to decipher a range of images and advertisements presented to them. At the same time, many of these young people felt cynical about the association of products with such body imagery, suggesting a degree of resistance on their part to the significations the images construct, with many choosing to read the images literally and thus disputing the validity of the relationship advertisements attempted to construct between the products and the symbolic values attributed to particular body shapes and sizes. In this regard, the study suggests that adolescents cannot be viewed as pawns of advertising or 'cultural dopes'. On the other hand, the affective responses of the participants to the images they viewed in task 1 suggest that some of the cultural norms associating bodies with particular social values seem to have been internalised.

The point may be made that few of the females and none of the males questioned the appropriateness of using body imagery to sell products, with the notable exception of their universal condemnation of the advertisement for cigarettes. In other words, the idea of the body as a commodity was for the majority of participants commonplace. Indeed, their unproblematic acceptance of this notion was central to their competence in deciphering body imagery in a commercial context. These participants do not lack the skills required for deciphering advertisements utilising body imagery. Nonetheless, perhaps there is a role for school programs to provide young people with the skills and information required to make critical appraisals of media representations of bodies, and to better understand their own affective responses to such imagery. The purpose of such a role might be to alert young people to the less desirable social consequences of the normalising effects of body imagery, to the socially constructed nature of gender differences that may lead to stereotyping, compulsory heterosexuality and homophobia, and to the associations of a particularly narrow range of body shapes and sizes with femininity and masculinity.

The Health and Physical Education Statement and Profile provide a framework for the development of school programs that address these purposes. Elements of the two concept strands of the Statement -- 'Human Functioning and Physical Activity' and 'Community Structures and Practices' -- particularly 'Movement and Participation', 'Identity' and 'Consumer and Community', deal directly with media, popular culture and body image. Issues of sexuality and sexual stereotyping are raised in relation to 'Interaction, Relationships and Groups'. In addition, the Profile sets out the learning outcomes that may be reported on from school programs in 'Human Development', particularly in the substrand dealing with sexuality, in 'Physical Activity and the Community' through the substrand dealing with physical fitness and body shape, and in 'Human Relations through a focus on personal and cultural identity.

The findings of this study suggest that adolescent females and males may have different needs in terms of their understanding of the social and cultural significance of body imagery. In general terms, the males in this study made Group Z responses to images portraying young, slender and apparently healthy females, where they were inclined to view such images first and foremost in terms of their sexual appeal and physical attractiveness. It can be argued that this heterosexual

response may have been as much the product of peer expectation, even though the responses were written and confidential, as it is an indicator of developing heterosexual identities. It is, moreover, a particular kind of heterosexual response that positions women as the object of males' gaze (Corrigan, 1992). The level 6 'Human Development' outcome in the Profile provides students with opportunities to 'identify the influences that shape particular understandings of sex, sexuality and gender' (HPE Profile, 1994, p. 98) and could focus a program of work aimed at developing adolescent males' awareness of hegemonic masculinity and the objectification of female and male bodies.

At least as great a challenge for such a program is the number of males' Group X responses, indicated by the words 'disgusting', 'yuk', 'ugly', 'gross', 'sick', 'filth', 'repulsive', to images portraying women who were large or obese. They also in large numbers recorded Group X response to images of women with highly developed musculature, perhaps for the reasons noted by Kuhn (1988) that women body-builders threaten the idea of the naturalness of the body and also threaten the established gender order and conventional notions of femininity and masculinity. Threats to deeply sedimented interpretations of their own masculinity may also account for the males' generally hostile responses to images of partly clothed male bodies, except where the relative nakedness of these male bodies was legitimated within a sports context. This latter point would seem to lend support to the claim by Miller (1990) and others that sport legitimates the homoerotic gaze by men on other men's bodies. In light of these connections between body imagery and physical activity, it would seem to be important to help young men better understand their affective responses to body imagery by connecting issues of sexuality with the 'Movement and Participation' element of the Statement, where 'they examine the influences on their own and others' understanding and beliefs about fitness of such things as media and cultural views on body image' (HPE Statement, 1994, p. 33).

The females' affective responses show distinct differences to those of their male counterparts in this study. The majority recorded Group Z responses, using words like 'beautiful', 'good body', 'fitness', 'jealous', 'guilty', 'energy', 'smart', indicating that these were images with which they identified, a point that lends support to the

work of Morse (1987-8) on women's interpretations of female bodies represented on exercise video tapes. That most of the images in this study were of females might make this conclusion less remarkable than it might otherwise be, though the proportion of these images of females in the study reflects proportions of images of female and male bodies in more general circulation in the media<sup>5</sup>.

There is little evidence in the results of the study to suggest that the female participants' gendered identity was threatened or called in to question by these images of bodies in the way masculine identity seemed to be threatened for males. Males responded negatively to the idea that they may enjoy viewing male bodies outside a sports setting and were threatened by women's bodies that challenged the strength and size of men's bodies. Females, in contrast, tended to focus on the question of whether their own bodies could be perceived to approximate the standards of normality set by female bodies in the advertisements and other images.

However, identification with an image made females less tolerant of advertisements that seemed to oversell the links between body shape and size and a particular product, and frequently produced a cynical response to a product. The line between what was perceived and what was

not perceived to be an acceptable body shape or size with which individuals might identify seemed to depend on the context in which the images appeared and the significations generated. Advertisements that linked health products such as low fat calcium enriched milk, low fat cheese, and low fat yoghurt with slenderness provoked less cynicism than images linking such bodies with beauty products or beef extract drinks. These associations influenced both females and males in this study and may be located within the context of the rise of the 'new health consciousness' (Crawford, 1987).

In summary, these results might suggest a different emphasis in programs for female adolescents' from their male counterparts. While the males' needs may suggest the foregrounding of a concern for them to better understand their own affective responses to body imagery, programs for females might foreground skills of critical analysis and deconstruction. This is not to suggest that females and males would not engage in both forms of activity, but instead to signal where emphasis may be placed at this adolescent stage of development. In terms of the HPE Statement, the emphasis for young men at this stage may be focused in the 'Interactions, Relationships and Groups' area, while the young women may benefit from a greater exposure to 'Consumer and Community'. The linking theme in both cases could be 'Identity', both in relation to 'the impact of (body) images on young people, especially in relation to diet, participation in physical activity and feelings of self-worth and acceptability' (HPE Statement, p. 35) and students' abilities to 'critically examine ways in which sexual relationships are portrayed

and promoted in society' (HPE Profile, p. 98).

## Conclusion

The social construction of identity in and through various forms of media is not a recent development in Australian society, but there is compelling evidence to suggest that visual media in particular has begun to occupy a larger role in this process than was formerly the case. In an age of 'visualcy' (Spender, in Kenway, 1995), the needs of young people for skills that enable them to understand how images are constructed and the social effects of imagery, particularly connected through advertising to consumer culture, seem more and more pressing. As a number of writers have pointed out (eg. Aronowitz and Giroux, 1985), it may be more difficult than we realise to provide young people with a visual form of literacy through criticism and deconstruction of the icons of popular culture.

The study reported in this paper provides some data on the ways in which female and male adolescents interpret images of the body, and may provide some insights into the use of materials such as the Health and Physical Education Statement and Profile in developing programs that educate young people about the relationships between the regulatory and normalising effects of body imagery, the socially constructed nature of gender differences and the sedimentation of heterosexualism and homophobia. The social construction of bodies, achieved in part through young people's uses of body imagery, seems to be related to the development of identity and sexuality. In developing school programs that educate young people about body imagery, it would seem to follow that a cross school and cross subject approach needs to be taken in which consistent linkages are made for students between these key themes of identity, sexuality and embodiment.

## References

Andrews, D.L. & Loy, J.W. (1993) British cultural studies and sport:

Past encounters and future possibilities. *Quest* 45 (2), 255-76.

Aronowitz, Stanley and Giroux, Henry A. (1985) *Education under seige: The conservative, liberal and radical debate over schooling* London: Routledge and Kegan Paul.

Australian Education Council (1994) *A statement on health and physical education for Australian schools* Carlton: Curriculum Corporation.

Australian Education Council (1994) *Health and physical education - A curriculum profile for Australian schools* Carlton: Curriculum Corporation.

- Bisnette, P.J. (1990) A new literacy for the young: Adolescent cross-media use. *Australian Journal of Communication* 17 (2), 55-66.
- Carey, G. & Lette, K. (1979) *Puberty blues* Melbourne: McPhee Gribble.
- Corrigan, A. (1992) Fashion, beauty and feminism. *Meanjin* 51 (1), 107-22.
- Cowie, E. (1977). Women, representation and the image. *Screen Education*, 2-3, 15-23.
- Crawford, R. (1987) Cultural influences on prevention and the emergence of a new health consciousness. In Weinstein, N. (Ed.) *Taking care: Understanding and encouraging self-protective behaviours* (pp. 45-61) Cambridge: Cambridge University Press.
- Duncan, M. C. & Sayaovong, A. (1990) Photographic images and gender in *Sports Illustrated for Kids*. *Play & Culture* 3, 91-116.
- Featherstone, M. (1982) The body in consumer culture. *Theory, Culture and Society* 1 (2), 18-33.
- Fiske, J. (1987) *Television culture* London: Methuen.
- Fitzclarence, L. (1990) The body as commodity. In Rowe, D. & Lawrence, G. (Eds.) *Sport and leisure: Trends in Australian popular culture* (pp. 96-108) Sydney: Harcourt Brace Jovanovich.
- Fox, K.R. & Corbin, C.B. (1992) The physical self-perception profile: Development and preliminary validation. *Journal of Sport and Exercise Psychology* 11, 408-30.
- Frank, A.W. (1990) Bringing bodies back in: A decade review. *Theory, Culture and Society* 7, 131-62.
- Giddens, A. (1991) *Modernity and self-identity: Self and society in the late modern age* Stanford: Stanford University Press.
- Gill, G. (1979) The Signs of Consumerism. *Arena* 53, 28-39.
- Greendorfer, S.L. (1991) Gender ideology and mass media images of women in sport. Paper presented to the Girls and Women in Sport Symposium, Slippery Rock University, February.
- Gruneau, R.S. (1988) Modernization of hegemony: Two views on sport and social development. In Harvey, J. & Cantelon, H. (Eds.) *Not just a game* (pp. 9-32) Ottawa: University of Ottawa Press.
- Hall, S. (1985) Signification, representation, ideology: Althusser and

the post-structuralist debates. *Critical Studies in Mass Communication*, 2 (2), 91-114.

Harris, M.B., Harris, R.J., & Bochner, S. (1982) Fat, four-eyed and female: Stereotypes of obesity, glasses and gender. *Journals of Applied Social Psychology* 12, 503-16.

Heinemann, K. (1980) Sport and the sociology of the body. *International Review of Sport Sociology* 15, 41-55.

Heaven, P. & Rowe, D. (1990) Gender, sport and body image. In Rowe, D. & Lawrence, G. (Eds.) *Sport and leisure: Trends in Australian popular culture* (pp. 59-73) Sydney: Harcourt Brace Jovanovich.

Huon, G.F., Morris, S.E. & Brown, L.B. (1990) Differences between male and female preferences for female body size. *Australian Psychologist* 25 (3), 314-17.

Johnson, L. (1984) The uses of media: An interpretation of the significance of the mass media in the lives of young people. *Discourse* 4 (2), 18-31.

Karmatz, F.N. (1985) Teenage attitudes towards the mass media. *Australian Journalism Review* 7, 108-13.

Kenway, Jane (1995) Reality bytes: Education, markets and the information superhighway. *Australian Educational Researcher* 22 (1), pp. 35-66

Kirk, D. (1993) *The body, schooling and culture* Geelong: Deakin University Press.

Kuhn, A. (1988) The body and cinema: Some problems for feminism. In Sheridan, S. (Ed.) *Grafts: feminist cultural criticism* (pp. 11-23) London: Verso.

McKay, J. (1995) *Embodying the 'new' sporting woman*. Hecate

McKay, J. (1994a) 'Just Do It': Corporate sports slogans and the political economy of 'enlightened racism'. Paper presented to the Fifth Congress of the International Association for Semiotic Studies, University of California, Berkeley, June.

McKay, J. (1994b) Masculine hegemony, the state and the incorporation of gender equity discourse: The case of Australian sport. *Australian Journal of Political Science* 29, 82-95.

- McKay, J. & Huber, D. (1988) Swan sport and ideology. *Arena* 83, 177-29.
- McKay, J. & Rowe, D. (1987) Ideology, the media and Australian sport. *Sociology of Sport Journal* 4 (3), 258-73.
- Mauss, M. (1973) Techniques of the body. (Trans. Brewster, B.) *Economy and Society* 2, 70-87.
- Melville, D.S. & Maddalozzo, J.G.F. (1988) The effects of a physical educator's appearance of body fatness on communicating exercise concepts to high school students. *Journal of Teaching in Physical Education* 7, 343-52.
- Miller, T. (1990) Sport, media and masculinity. In Rowe, D. & Lawrence, G. (Eds.) *Sport and leisure: Trends in Australian popular culture* (pp. 74-95) Sydney: Harcourt Brace Jovanovich.
- Morse, M. (1983) Sport on television: Replay and display. In Kaplan, E.A. (Ed.) *Regarding television: Critical approaches - an anthology* (pp. 44-66) Los Angeles: University Publications of America.
- Morse, M. (1987-8) Artemis aging: Exercise and the female body on video. *Discourse* 10 (1), 20-53.
- O'Kelly, G. (1993) Switching on. *Eureka Street* 3, 16-18.
- Postman, N. (1985) *Amusing ourselves to death: Public discourse in the age of show business* London: Heinemann.
- Rothfield, P. (1986) Subjectivity and the language of the body. *Arena* 75, 157-65.
- Sachs, J., Smith, R. & Chant, D. (1991) How adolescents use the media. *Youth Studies* 10 (2), 16-20.
- Shilling, C. (1991) Educating the body: Physical capital and the production of social inequalities. *Sociology* 25 (4), 653-72.
- Shilling, C. (1993) *The body and social theory* London: Sage.
- Stratton, J. (1992) *The young ones: Working class culture, consumption and the category of youth* Perth: Black Swan.
- Theberge, N. (1991) Reflections on the body in the sociology of sport. *Quest* 43 (2), 123-135.
- Tiggeman, M. & Pennington, B. (1990) The development of gender differences in body-size dissatisfaction. *Australian Psychologist* 25

(3), 306-13.

Williamson, J. (1978) *Decoding advertisements: Ideology and meaning in advertising* London: Marion Boyars.

Winn, M. (1977) *The plug-in drug: Television, children and the family* New York: Penguin.

Wright, J. (1990) *Comparisons of difference: Gendered representations of the body in sport*. Paper presented to the Commonwealth and International Conference on Physical Education, Sport, Health, Dance, Recreation and Leisure, Auckland, New Zealand, January.

## Tables

Table 1: Results of Task 1 - Numbers of Total Responses

### Images

Group Z Group Y Group X

1. (Model in swimwear) 27103
2. (Female body builder) 32017
3. (Male body builder) 151015
4. (Make that diet work) 3134
  
5. (Male weight lifter) 91417
6. (Female runners) 13243
7. (No pain, no gain) 18166
8. (Female water skier) 20119
9. (Knitwear models) 131512
10. (Gail Heggie) 10921

Table 2: Responses to Task 1 - Numbers of Female and Male Responses

### Images Females Males

Z Y X Z Y X

1. (Model in swimwear) 11631640
2. (Female body builder) 18112126
3. (Male body builder) 26121343
4. (Make that diet work) 18111523
5. (Male weight lifter) 668389
6. (Female runners) 91014142
7. (No pain, no gain) 8841082
8. (Female water skier) 9651154

9. (Knitwear models)1073389
10. (Gail Heggie)9651316

Table 3: Responses to Task 2 - Numbers of Female and Male Responses to Question (a)  
(What is the message of this advertisement?)

ImageFemaleMale  
Within RangeOutside RangeWithin RangeOutside Range

1. (Weight loss promise)200200
2. (Low fat yoghurt)200200
3. (Bovril body)020119
4. (Low fat milk)416317
5. (Beauty products)200200
6. (Low fat cheese)200200
7. (Father & baby son)812416
8. (Cigarettes)200200
9. (Disco dancer)155173
10. (Tampons)200200

Table 4: Responses to Task 2 - Numbers of Female and Male Responses to Question (b)  
(Do you think this is a good advertisement?)

ImageFemaleMale  
YesNoYesNo

1. (Weight loss promise)164155
2. (Low fat yoghurt)155164
3. (Bovril body)020020
4. (Low fat milk)416317
5. (Beauty products)6141010
6. (Low fat cheese)164155
7. (Father & baby son)713218
8. (Cigarettes)812317
9. (Disco dancer)515317
10. (Tampons)155182

Table 5: Responses to Task 2 - Numbers of Female and Male Responses to Question (c)  
(How do you feel about the message [of this advertisement]?)

ImagesFemalesMales  
ZY XZY X

1. (Weight loss promise)11091109
2. (Low fat yoghurt)81111307
3. (Bovril body)03170218
4. (Low fat milk)30174115
5. (Beauty products)41155015
6. (Low fat cheese)12081127
7. (Father & baby son)80123017
8. (Cigarettes)00201118
9. (Disco dancer)51053107
10. (Tampons)14061802

1 This paper is based on the findings of the School Physical Education and Media project, located at Deakin University and funded by the Australian Research Council in 1990 and 1991. Lindsay Fitclarence, David Kirk and Richard Tinning were co-researchers on the project, assisted by Heather Cooney (1991) and Jill Warneke (1990). While this team contributed to the design of the study and to the collection and collation of data, the interpretations of the data reported in this paper are the responsibility of the author alone.

2 I would like to acknowledge Dr Jim MacKay's assistance in formulating the previous two paragraphs of text.

3 The labels Group Z, Group Y and Group X are intended to be descriptors of clusters of student responses that seemed to the researchers to share similar features.

4 Of course, there is also the distinct possibility that these are examples of humour on the part of students.

5 The images used for the tasks were culled from two years of research with these students and represent the proportions of images generally accessible to this group.