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**Title:** Body image diversity in the media: A content analysis of women's fashion magazines

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### Abstract

**Issue:** The narrow representation of body image in the media has been linked to body dissatisfaction, particularly among readers of women's fashion magazines. Some countries have made efforts to improve body image diversity in the media and the fashion industry. This has included attempts to regulate minimum body size of models (e.g. Israel, France), and the development of codes of practices such as the Australian Industry Code of Conduct on Body Image. However, there is little evidence of whether these efforts have impacted media content. **Method:** This study aimed to gauge the state of body image diversity in the print media 5 years after the introduction of the Australian Code of Conduct via a content analysis of 13 Australian women's fashion magazines published in 2015. **Results:** Results revealed low levels of diversity in body size, ethnicity, and age among models depicted in fashion magazine images. Models were predominantly young, white, and underweight. **Conclusion:** The results suggests that efforts to improve body image diversity have had little impact on print media. Further research is needed to understand the barriers to increased diversity in the representation of body image in the media so that the industry and regulatory bodies can further address this important issue. This is increasingly pressing given the proliferation of content now enabled through online media platforms.

**Short Abstract:** This study aimed to gauge body image diversity in the print media via a content analysis of 13 Australian women's fashion magazines published in 2015. Results revealed low levels of diversity in body size, ethnicity, and age among models depicted in fashion magazine images.

**Keywords:** body image, communications media, magazines, content analysis, diversity

Negative body image, or body dissatisfaction, is widespread and persistent among women and men of all ages<sup>1,2</sup>. It is a serious health concern as it can lead to harmful weight loss practices, including disordered eating and excessive exercise, and is associated with other risky health behaviours such as smoking and unsafe sexual practices<sup>3-5</sup>. Additionally, body dissatisfaction in girls and women has been shown to have economic consequences through its associations with reduced educational and social participation, and reduced confidence and performance levels, and finding that objectification reduces cognitive capacity<sup>6-9</sup>. Given its wide-ranging impacts, identifying and reducing factors that contribute to body dissatisfaction are critical areas of research.

Amongst the many and varied factors influencing body image, the media is thought to play a significant role. Fashion magazines, and the broader fashion and beauty industries, in particular have been the focus of scrutiny for their frequent use of thin models and digital alteration of images<sup>10,11</sup>. Cross-sectional research studies confirm that female fashion models are more likely to be underweight compared to non-models<sup>12,13</sup>, and the practice of digitally altering images of models to look thinner is considered the norm in the fashion industry<sup>14</sup>. Moreover, there is now considerable evidence to support the assertion that exposure to oftentimes unrealistic and unattainable body images in the media has a detrimental impact on women's body image through social comparison, objectification, and internalization of the thin ideal<sup>15,16</sup>.

A variety of strategies aimed at reducing the impact of the media on body image have been developed. Consumer-targeted strategies such as university-based body image interventions that include a media literacy component have shown some promise<sup>17</sup>. However, greater impact is likely with content-targeted strategies such as the implementation of government policies and legislation that directly changes practices in the fashion industry and associated media. In 2009, the Australian government formed a National Advisory Group on Body Image. From a range of 'soft' and 'hard' regulatory policy instruments available, the Advisory Group developed a voluntary Industry Code of Conduct on Body Image<sup>18</sup>. This code of conduct contained seven 'good-practice' principles for the advertising, fashion, and media industries including diversity in the representation of body size and ethnicity, use of healthy weight models, and guidelines for the use of digital alteration. The code was launched alongside a Positive Body Image Awards scheme that recognised efforts by the industry to promote positive body image. Other countries have gone a step further, imposing legal requirements for fashion models and the use of digital alterations. In 2013, Israel introduced a law which required fashion models to have a BMI of at least 18.5 kg/m<sup>2</sup>, proven

by a medical certificate no older than three months, and for any digitally altered images to have a visible warning label, stating that alterations have been made, covering 7% of the size of the image surface area <sup>19</sup>. Similarly, in 2015 amendments were made to the French Health Bill requiring models to be of a minimum BMI of 18 <sup>20</sup>. The law has only recently come into effect but with the BMI cut-off replaced with a requirement for models to have a medical certificate stating they are healthy to work, and for images in which a model's appearance has been manipulated to be labelled as retouched. Other initiatives have come from the industry itself, such as the Dove Real Beauty and Target Loves Every Body campaigns.

Although these efforts suggest greater awareness, both within government bodies and the fashion industry, of the need to depict diversity in appearance, there is little evidence of whether this work has resulted in greater diversity in the appearance of women depicted in fashion magazines. Content analysis of magazine content is a useful and widely used technique <sup>21-27</sup> and can be used to determine the extent to which fashion magazines comply with standards or expectations of body diversity. This approach has been used previously to explore magazine representation of older women <sup>27</sup>, masculinity in men's lifestyle magazines <sup>23</sup>, and gender role portrayals <sup>24</sup>.

A content analysis study by Boyd and Moncrieff-Boyd <sup>28</sup> explored whether magazines upheld aspects of the Australian Voluntary Industry Code of Conduct on Body Image <sup>18</sup>. The study looked at the representation of diverse body shapes and sizes in the annual swimsuit issues of seven Australian women's magazines <sup>28</sup>. Three criteria were used: evidence of at least one fuller size/plus size model, evidence of various body shapes and sizes, and evidence of body enhancement tips for diverse body types. It was found that while most magazines upheld at least one of the three analysis criteria, only one magazine showed evidence of all three criteria. This magazine, Madison, has since been discontinued. The study also found that some magazines represented and discussed body image and diversity in a potentially problematic manner. For example, providing tips on how to hide or disguise body areas rather than tips for dressing to suit body figures. The authors recommended future analysis of diversity in body shapes, ages and ethnicities in contemporary magazines to ensure claims of diversity are objectively monitored. Although this study found partial adherence to the Code of Conduct, it was conducted shortly after the Code's release and warned of the potential for the results to be placatory and short-lived.

This study therefore aimed to gauge the state of body image diversity in the print media 5 years after the introduction of the Australian Code of Conduct. Specifically, the study aimed to evaluate diversity in the visual representation of body size, ethnicity and age in

Australian women's fashion magazines published in 2015 using content analysis. It was expected that diversity would be low across all three aspects of appearance.

## **Method**

### **Selection of Magazines**

Thirteen magazines were selected for inclusion in this study (all Australian editions): Elle, Vogue, Marie Claire, Harper's Bazaar, Yen, Frankie, Oyster, Cosmopolitan, Cleo, Shop Til You Drop, InStyle, Dolly and Girlfriend. Magazines were included if they targeted adolescent and adult females, were primarily focused on fashion rather than lifestyle and/or gossip, and were readily available in Australian newsagencies. Australian magazine readership information by Roy Morgan Research<sup>29</sup> indicated that 11 of the magazines had combined readership of approximately 12.4% (readers 14 years and older), equating a readership of about 2,409,000. Including Next Media's information for Yen<sup>30</sup>, the combined readership totals approximately 2,559,000. Readership information was not available for Oyster. One issue of each magazine published was selected for analysis based on convenience, spanning January to October 2015.

### **Image Inclusion Criteria**

All images within the magazines were included in the analysis if they contained a real-life image of a female (i.e., not a drawing or cartoon), were not children, and the arms and/or legs were visible including arms and/or legs visible through tight clothing. If more than one model was depicted, each model was rated separately. Coding included whether the image was embedded within an advertisement or was magazine-generated content (e.g., fashion spreads).

### **Coding Procedure**

Body size was classified using the Stunkard Figure Rating Scale (FRS)<sup>31</sup>. The FRS is a visual scale of nine silhouette figures increasing in size from 1 (very thin) to 9 (very obese). It has been widely used as a self-report measure of perceived and ideal weight status, and is considered suitable for the assessment of an individual's relative weight or size by an observer<sup>32</sup>. A recent review of figure rating scales found the FRS to have high reliability and validity<sup>33</sup>, on par with other recent scales such as the Photographic Figure Rating Scale<sup>34</sup>. Previous studies suggest the FRS figures can be classified into five categories: underweight

(figures 1 and 2), appropriate weight (figures 3 and 4), slightly overweight (figures 5), overweight (figures 6 and 7), and obese (figures 8 and 9)<sup>35, 36</sup>.

As few previous studies have examined ethnicity and age, this study aimed to provide a preliminary indication of ethnicity diversity by categorising images based on skin colour as 'white' (i.e., Caucasian) or 'other', and of age diversity by categorising images as 'young' and 'older' (i.e., showing wrinkles and/or grey or greying hair).

### **Content analysis procedure**

All images were rated by the first author. To measure intra-rater reliability, 60 images were re-coded by the same rater one week later. Percentage agreement was 100%. Inter-rater reliability was assessed by having a second rater (third author) code 15% of the images. Percentage agreement was 85% for body size, 95% for ethnicity, and 100% for age. Percentage agreement above 80% is considered acceptable<sup>37</sup>.

### **Results**

A total of 1,182 images depicting 1,534 models were included in the analysis. Of these images, 293 (25%) were embedded within advertisements. The mean number of model per magazine was 118, and ranged from 28 (Yen magazine) to 190 (Shop Til You Drop magazine).

Table 1 shows the percentage representation of each body size using the FRS for the thirteen magazines. Of the 1,534 models, 1,141 (74%) were classified underweight (figures 1-2), 380 (25%) as appropriate weight (figures 3-4), 10 (1%) as slightly overweight (figures 5), and 3 (0.2%) as overweight (figures 6-7). No models were classified as obese (figures 8-9). There was considerable variation across magazines. For example, 54% of models in Dolly were classified as underweight compared to 96% of models in Shop Til You Drop.

Table 2 shows the percentage representation of ethnicity and age. Regarding ethnicity, 1,386 (90%) of all models were classified as white. Across magazines this ranged from 84% (Marie Claire) to 100% (Cleo). Looking at age, just 12 (1%) of models were classified as older. Eight of the magazines did not depict any older models. The greatest age diversity was observed for Frankie, with 5% of models depicted being of older age.

Across both advertisement images and other images, on average 73% of models were underweight, whilst 26-27% were classified as appropriate weight. In the advertisements, there were no models classified as slightly overweight, overweight or obese. However, less than one per cent of models were classified as slightly overweight and overweight in other

images. None of the advertisements analysed in this study depicted models of non-white ethnicity and/or older age.

## Discussion

Overall there was little diversity amongst body images represented in Australian women's fashion magazines. Across the thirteen magazines examined, models were mostly underweight, white, and young. Just one in four models were observed to be of an appropriate weight or larger, with less than 1% observed to be overweight. There was little difference in diversity between advertisements and non-advertisements aside from a small representation of overweight body sizes in the non-advertisement images.

These findings are unsurprising given those of previous studies<sup>27, 28</sup>; however they are disappointing given recent efforts to change practices and improve diversity in the representation of females in the media. Unfortunately, these findings appear to confirm that voluntary efforts such as the Australian Voluntary Industry Code of Conduct on Body Image have had a placatory and short-lived impact on media practices, at least in the print media. Initiatives by government, industry and other sectors are to be commended, yet there is a clear need to ensure these initiatives are effectively implemented and evaluated in an ongoing manner to ensure sustained impact. For example, the Australian Voluntary Industry Code of Conduct on Body Image initiated in 2010 was an admirable achievement. However, its voluntary nature limited implementation, and it was essentially abandoned upon a subsequent change in government in 2013.

Of importance, policy and legislative strategies aimed at changing industry practices need to be made in consultation with industry to identify and address any barriers to change. Furthermore, efforts to address the effects of media on body image must be multifaceted. Policy efforts need to be complemented with education and advocacy, including evidence-based interventions like media literacy and cognitive dissonance programs<sup>17</sup>, and increased critical discourse regarding sociocultural constructions of acceptable body size and appearance<sup>38</sup>.

Although the study is helpful in contextualizing the current state of diversity in Australian women's fashion magazines, some limitations should be noted. First, only one issue of each magazine was analysed and selected based on convenience of availability. Other issues of the same magazine may have included more diverse range of models, and may have identified seasonal differences. Second, the classification categories used for age, ethnicity and body size could be considered simplistic and somewhat subjective. However,

obtaining actual data on the characteristics of models was not feasible, and the coding system arguably represents how the magazine images would be perceived by readers. The simplicity of the coding also allows for ease of replication in follow-up studies. Indeed, the current study showed the rating system to have good intra- and inter-rater reliability. That said, the dichotomous categorisation of ethnicity remains problematic as it limits a more nuanced consideration of ethnic diversity and may inadvertently validate the dominant representation of white females in magazines. Third, images were only included in the ratings of ethnicity and age if they had met inclusion criteria which were designed to allow ratings of body size (i.e., visible arms and/or legs). More inclusive criteria for these ratings (e.g., head shot only) may have increased the degree of ethnicity and age diversity observed. However, our impression from the rating process is that any such effect would be minimal.

Finally, the analysis was restricted to print magazines. Analysis of other forms of media is of growing importance given the rise in social media and magazines' increased use of online platforms. Indeed, four of the magazines included in this study, Dolly, Yen, Cleo and Shop Til You Drop have since ceased publication with many attributing their decline to readers shifting their media use online. That said, there is much to learn from studies such as this which highlight the difficulties of developing and implementing policies which will have significant impacts on diversity in the media. The proliferation and speed of content delivery in the online space suggest this will be even more challenging as technology progresses.

Beyond these limitations, the study also had several strengths. A large number of magazine were included for analysis, covering a large readership. Intra-rater and inter-rater reliability showed a high level of consistency across the measures. Diversity was measured not only by body size but also by age and ethnicity, therefore providing a more complete indicator of diversity.

The study highlights several areas in need of further investigation and development. Firstly, there is a clear need for initiatives targeting media content that are evidence based. For example, although it was thought that labelling images as photoshopped/alterd would reduce negative effects on body image, studies have found that such labelling may not be effective and may sometimes have a detrimental effect on body image compared to no label<sup>39</sup>. In contrast, it has been shown that exposure to advertisements depicting average-sized models has a less negative effect on women's body image compared to exposure to advertisements depicting thin models, whilst having no significant impact on the effectiveness of the advertisement<sup>40</sup>. Second, when evidence is lacking to inform selection of strategies, there needs to be a well-planned evaluation framework in place to determine the

effectiveness of implemented strategies. Such evaluation frameworks can then ensure that initiatives which are effective are maintained, and those that are ineffective are ceased. Regular monitoring and reporting of body image diversity in the media through content analysis, such as that undertaken for this study, can form both a strategy for encouraging change by identifying narrow and biased representation, and a way by which to evaluate the effectiveness of specific interventions. Monitoring may, however, require more complex, innovative methodologies to capture the variety and volume of media now available, particularly social media<sup>41</sup>. Finally, there is a need for government and advocates for body image diversity to more effectively engage the fashion and beauty industries in efforts to improve body image attitudes and diversity. By working together, industry bodies, government, and advocates might better gauge the feasibility of proposed initiatives and more readily identify strategies will bring about change.

### **Conclusion**

In sum, this study found little diversity amongst the images in adolescent and adult women's magazines in Australia, 5 years after the launch of the Australian Voluntary Industry Code of Conduct on Body Image<sup>18</sup>. The predominant representation was of underweight, white, young women. The findings suggest that the effectiveness of soft policy options, such as voluntary codes of conduct, to promote diversity in magazine images are ineffective in the long term. It is likely that a raft of 'harder' approaches, including mandatory regulation, economic incentives/disincentives, along with media literacy education need to be considered concurrently in order to address the issue of media's negative impact on body image.

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**Table 1.**Number (%) representation of body sizes for each magazine using Stunkard's (1983) Figure Rating Scale (FRS)<sup>a</sup>.

Magazine	Images, n	Models, n	FRS Figure Rating, n (%)								
			1	2	3	4	5	6	7	8	9
Cleo	104	121	1 (1)	85 (70)	32 (26)	3 (2)	-	-	-	-	-
Cosmopolitan	110	126	3 (2)	92 (73)	18 (14)	11 (9)	2 (2)	-	-	-	-
Dolly	78	123	-	67 (54)	43 (35)	11 (9)	1 (1)	1 (1)	-	-	-
Elle	121	164	17 (10)	122 (74)	25 (15)	-	-	-	-	-	-
Frankie	55	62	1 (2)	37 (60)	12 (19)	5 (8)	5 (8)	2 (3)	-	-	-
Girlfriend	94	112	1 (1)	66 (59)	33 (29)	12 (11)	-	-	-	-	-
Harper's Bazaar	111	139	11 (8)	91 (65)	35 (25)	2 (1)	-	-	-	-	-
InStyle	78	100	1 (1)	79 (79)	17 (17)	2 (2)	1 (1)	-	-	-	-
Marie Claire	120	159	6 (4)	103 (65)	47 (30)	3 (2)	-	-	-	-	-
Oyster	76	82	2 (2)	66 (80)	13 (16)	-	1 (1)	-	-	-	-
Shop Til You Drop	121	190	10 (5)	173 (91)	7 (4)	-	-	-	-	-	-

Table 1 continued.

Magazine	N images	N models	FRS Figure Number								
			1	2	3	4	5	6	7	8	9
Vogue	88	128	2 (2)	88 (69)	34 (27)	4 (3)	-	-	-	-	-

Magazine	N images	N models	FRS Figure Number								
			1	2	3	4	5	6	7	8	9
Yen	27	29	0 (0)	17 (61)	8 (29)	3 (11)	-	-	-	-	-
Total, n (%)	1182	1534	55 (4)	1086 (71)	324 (21)	60 (4)	10 (1)	3 (0.2)	0 (0)	0 (0)	0 (0)

Note. The stimuli for the Figure Rating Scale range from 1 (underweight) through to 9 (obese).

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**Table 2.**

Representation of ethnicity and age for each magazine.

Magazine	Ethnicity, n (%)		Age, n (%)	
	White	Other	Young	Older
Cleo	121 (100)	0 (0)	121 (100)	0 (0)
Cosmopolitan	110 (87)	16 (13)	126 (100)	0 (0)
Dolly	106 (86)	17 (14)	120 (98)	3 (2)
Elle	152 (93)	12 (7)	162 (99)	2 (1)
Frankie	60 (97)	2 (3)	59 (95)	3 (5)
Girlfriend	99 (88)	13 (12)	112 (100)	0 (0)
Harper's Bazaar	132 (95)	7 (5)	138 (99)	1 (1)
InStyle	91 (91)	9 (9)	100 (100)	0 (0)
Marie Claire	134 (84)	25 (16)	156 (98)	3 (2)
Oyster	77 (94)	5 (6)	82 (100)	0 (0)
Shop Til You Drop	166 (87)	24 (13)	190 (100)	0 (0)
Vogue	110 (86)	18 (14)	128 (100)	0 (0)
Yen	28 (100)	0 (0)	28 (100)	0 (0)
Total, n (%)	1386 (90)	148 (10)	1522 (99)	12 (1)