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The effect of weight controllability beliefs on prejudice and self-efficacy

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An experiment was conducted to test for the presence of prejudice towards obesity and whether weight controllability beliefs information reduces this prejudice and impacts on a person’s own healthy eating self-efficacy. The experiment randomly allocated 346 participants (49 males) into one of three conditions: controllable contributors toward obesity condition (e.g., information about personal control about diet and exercise); uncontrollable contributors toward obesity condition (e.g., information about genes, factors in society); and a control condition with no information given. Prejudice was present in 81% of the sample. High prejudice was predicted by low self-efficacy for exercise and weight. Weight controllability beliefs information had no significant effect on prejudice levels or exercise or healthy eating self-efficacy levels. Increasing self-efficacy for exercise and weight may help reduce prejudice towards obese individuals.
The effect of weight controllability beliefs on prejudice and self-efficacy

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Introduction

The World Health Organisation (2015) reports that worldwide obesity rates have nearly doubled since 1980. In 1995, 56.3% of Australian adults were overweight or obese and this rate has increased in 2011-2012 to 62.8%. This figure comprises 35.3% overweight and 27.5% obese adults (Australian Bureau of Statistics, 2013). As rates of obesity have increased, so too have people’s experiences of prejudice (Puhl & Heuer, 2010), with the view that obese individuals are responsible for their obesity (Brownell et al., 2010), and the value Western society places on thinness and health (Gronning, Scambler, & Tjora, 2013). The evidence that prejudice directed at obese individuals is present in Western society is generally well documented (Puhl & Heuer, 2009). Research has found that this prejudice can be harmful, potentially reducing a person’s ability to perform the healthy behaviours necessary to lose weight (e.g., Lewis, Thomas, Blood, Castle, Hyde, & Komesaroff, 2011). However, it should be noted when it comes to dieting, it may not lead to better health as such and given its association with unhealthy behaviours such as disordered eating, it may in fact have negative consequences (e.g., Loth, MacLehose, Bucchianeri, Crow, & Neumark-Stainer, 2014). Thus dieting behaviour can be used as an indicator for the ‘desire’ to lose weight but not necessarily used to achieve a healthier life.

When overweight participants are primed with weight-related stereotypes their intentions to improve their dietary and exercise-related behaviours are diminished (Seacat & Mickelson, 2009). The underlying factors explaining these effects are not clearly understood (Schmader, Johns, & Forbes, 2008). However, being reminded about your ‘shortcomings’ may cause increased levels of stress, increased negative self-assessment, such as thinking about past failures to improve health, and increased unhappiness about current body image (for discussion on some of these points see Schmader et al., 2008). These findings are backed up by studies where overt
weight stigma, such as inappropriate and negative comments from doctors, family, and friends, has been associated with increased rates of binge eating and poor treatment outcomes in the analysis of a 14-week behavioural weight loss program (Wott & Carels, 2010). An Australian study asking obese people what ways prejudice impacted on their lives (Lewis et al., 2011) found that it impacted on emotional health and wellbeing, especially self-worth and self-esteem. Feelings of depression, sadness, anxiety, worry, and loneliness were noted, as well as trouble forming new relationships and less social support.

No research has been identified that has measured the impact of weight controllability beliefs information on the stigmatiser’s own self-efficacy in performing healthy behaviours. It is important to examine self-efficacy and its potential role in prejudice increasing our theoretical understanding of prejudice and our ability to model and reduce prejudice. If individuals understand that they have control over their own health, in many situations their self-efficacy in relation to health could be expected to improve as well as and concurrently with their motivation and intentions to change their behaviour for the betterment of their health.

The impact of weight stigma on exercise motivation and behaviour was studied by Vartanian and Shaprow (2008) who found the more people experienced stigma, the higher their motivation to avoid exercise when controlling for body mass index (BMI) and body dissatisfaction. Vartanian and Novak (2011) found the relationship between experiencing weight stigma and avoiding exercise was moderated by internalisation of the stigma. Internalisation is the individual’s endorsement of societal standards of “attractiveness”. Puhl, Moss-Racusin, and Schwartz (2007) found that overweight and obese women who had internalised weight stigma (i.e., believed weight-based stereotypes) were more likely to binge eat and increase their intake of unhealthy food. Thus evidence supports the view that weight stigma does not motivate healthy
behaviours but rather suggests that an individual’s confidence to make changes is likely to be
effected if they internalise society’s stereotypes regarding overweight and obese.

Despite evidence suggesting that genetic (physiological) and environmental factors
outside the individual’s control can impact a person’s weight (e.g., Danielsdottir, O'Brien, &
Ciao, 2010), there are also perceptions that weight is manageable through healthy eating and
being physically active (e.g., Swinburn, Caterson, Seidell, & James, 2004). From a public health
perspective, it is important to consider how weight attributions influence peoples’ health. Wang,
Brownell, and Wadden (2004), for instance, note that unlike other prejudices such as race, obese
people often share the same negative stereotypes of obesity as healthy weight individuals. This is
further supported by a large-scale study conducted by Schwartz, Vartanian, Nosek, and Brownell
(2006) who reported a pervasive “anti-fat” bias among even their most obese participants.
Supporting this are recent findings suggesting that the higher the perception of being overweight
the higher the fear of being the victim of prejudice and thus the lower the self-efficacy for being
able to control their food intake (Major, Hunger, Bunyan, & Miller, 2014).

Weiner, Perry, and Magnusson (1988) posit that people habitually attribute controllable
causality to obese people therefore attributing blame to obese people and prejudicing them for it.
These weight controllability attributions are fed by Western societal values of individualism and
self-determination, prizing the belief that the individual is responsible for their own life and will
get what they deserve (Puhl, Schwartz, & Brownell, 2005). The attribution theory of prejudice
posited by Weiner et al. (1988) suggests that when the attribution of controllability is reduced,
predjudice towards obesity will be reduced. However, this may create a dilemma where reducing
personal control over weight and personal responsibility (Weiner et al., 1988) may reduce self-
efficacy in healthy weight and exercise management, with self-efficacy being an important
Research by Dar-Nimrod, Cheung, Ruby, and Heine (2014) suggests that exposing participants to information about genetic causation of weight may increase food consumption. However, it may be worth noting that the participants in this study were undergraduate students and no information about weight status or stigma was provided. If the goal of reducing weight stigma levels is achieved through education about how weight is not completely within a person’s control, it is important to ensure a reduction in healthy eating self-efficacy or exercise is not an unintended consequence. Healthy eating self-efficacy does not measure how healthy an individual’s diet is but rather the individual’s perception of control over eating behaviour.

Danielsdottir et al. (2010) found mixed support for interventions designed to reduce prejudice towards obesity, indicating limited support for the notion that reducing blame will alter prejudice levels. In a meta-analysis examining the effectiveness of weight bias interventions, Lee, Ata, and Brannick (2014) found that these interventions have a small, but positive, effect on weight attitudes and beliefs. However, these studies tended to be flawed with many methodological issues noted such as the lack of randomised control designs, pre- and post-intervention measures of prejudice not being assessed, and control conditions not utilised. The present study attempts to address these methodological concerns.

Some success has been reported in successfully changing participants’ genetic causal beliefs but this change was not followed by a change in prejudice towards obesity (Lippa & Sanderson, 2013). Additionally, beliefs that eating habits and lack of exercise contributed toward obesity have been addressed, with higher levels of prejudice supporting the relationship between controllability beliefs and prejudice towards obesity. Swift et al. (2013) reported that following an intervention involving participants watching anti-stigma films, health professionals’
beliefs about weight being under an obese person’s control were reduced and this change was maintained when measured six weeks later. Prejudice towards obesity was also reduced post-intervention but returned to baseline levels within six weeks.  

**Hypotheses**

The following hypotheses were proposed. First, prejudice towards obesity would be present in the sample, establishing the extent of prejudice in relation with previous findings. Second, there would be a relationship between prejudice towards obesity and exercise and healthy eating self-efficacy. Third, using randomised control trial design, a condition emphasising controllable contributors toward obesity would increase the level of prejudice towards obesity and a condition emphasising uncontrollable contributors would reduce the level of prejudice compared to a control condition. The present study employs a different manipulation and conditions than previous studies and addresses the methodological flaws and issues found in previous studies. Fourth, the condition emphasising controllable contributors toward obesity would increase the level of exercise and healthy eating self-efficacy and the condition emphasising uncontrollable contributors toward obesity would reduce the level of exercise and healthy eating self-efficacy compared to the control condition. This will also enable us to test if healthy eating or exercise self-efficacy is lowered as a consequence of reduced weight stigma.

**Method**

**Participants**

A total of 447 participants (Time 1) were recruited through online notices (university learning management systems), email, and word of mouth. Participation was voluntary and participants were eligible to enter a prize draw to win a $50 iTunes or Kindle voucher. Ages ranged from 18 to 78 years of age ($M = 36.53$, $SD = 13.27$) and there were 72 males and 375
females. Participants’ (Time 1) education levels were high with 17% having a postgraduate degree, 36% with a Bachelor’s degree, 18% with a vocational qualification, 24% with a Higher School Certificate, and 4% with a School Certificate or less.

At post-intervention (Time 2), 346 cases were matched to Time 1 cases. The attrition rate for the current study was 22.6%. The Time 1 only participants (non-completers) were not significantly different (two-tailed tests) from completers. That is, participants who completed both Time 1 and 2 in relation to age ($p = .828$), education ($p = .501$), exercise self-efficacy ($p = .957$), fat phobia ($p = .951$), or weight efficacy lifestyle ($p = .123$). The dataset combining Time 1 and Time 2 consisted of 49 males and 297 females. Male ages ranged from 18 to 67 ($M = 37.29, SD = 13.65$) and female ages ranged from 18 to 78 ($M = 36.68, SD = 13.12$). The study was approved by the university’s human research ethics committee, HE13-059.

**Materials**

Participants were asked to provide their sex, age, and highest level of education achieved. They were then asked “Do you perceive yourself to be of a healthy weight” on a scale of 1 (Not at all healthy) to 6 (Very healthy). We used this short measure rather than a longer published measure to try and reduce the time commitment of participants increasing the chances of retaining them for Time 2. The mean score of 3.85 ($SD = 1.52$), indicated the average weight perception of participants was rated slightly above moderately healthy. Three scales were utilised at Time 1 and repeated at Time 2.

The *Fat Phobia Scale Short Form* (FPS; Bacon, Scheltema, & Robinson, 2001) is a 14-item, 5-point semantic differential scale used to measure attitudes towards obesity. To assess these attitudes toward people with obesity, participants were asked to rate the items (adjective pairs) indicating how the words best described their feelings and beliefs about obese or fat
people. Examples include “lazy versus industrious” and “willpower versus no willpower.” FPS
scores range from 1 to 5, with 5 representing a high level of prejudice. Bacon et al. (2001)
reports Cronbach’s alpha of .87 and .91 in their two samples. The FPS in the present study had a
Cronbach’s alpha of .92.

Bacon et al. (2001) note that a score of 3.60 on the 14-item FPS indicates an average
amount of fat phobia. However, subsequent studies have suggested that scores below 2.50
indicate more positive attitudes toward obese people, while scores above 2.50 indicate more
negative attitudes (Puhl, Wharton, & Heuer, 2009). Thus scores above 2.50 are used in the
present study to indicate the presence of weight stigma (i.e., fat phobia).

The Exercise Self-Efficacy Scale (ESE; Bandura, 2006, cited and adapted by Everett,
Salamonson, and Davidson (2009) is an 18-item measure scored on an 11-point Likert scale
assessing a person’s exercise self-efficacy by asking participants to rate their level of confidence
that they can exercise on a regular basis when given hypothetical situations. For example, “Rate
your degree of confidence that you can perform exercise when feeling tired.” Ratings range from
0 (Cannot do at all) to 10 (Certain can do). Joseph, Royse, Benitez, and Pekmezi (2014) studied
the psychometric properties of the ESE on a sample of undergraduate university students and
found a Cronbach’s alpha of .89. The ESE scale in the present study had a Cronbach’s alpha of
.95.

The Weight Efficacy Lifestyle Questionnaire (WEL; Clark, Abrams, Niaura, Eaton, &
Rossi, 1991) contains 20 items scored on a 10-point Likert scale measuring a person’s perception
of their self-efficacy as concerns eating behaviour. The scale asks participants to rate their level
of confidence that they would not eat food in a number of hypothetical situations. Ratings range
from 0 (Not confident) to 9 (Very confident). The WEL has five subscales consisting of: negative
emotions (e.g., “I can resist eating when I am anxious or nervous”); availability (e.g., “I can control my eating on the weekends”); social pressure (e.g., “I can resist even when I have to say ‘no’ to others”); physical discomfort (e.g., “I can resist eating when I am in pain”); and positive activities (e.g., “I can resist eating when I am reading”). Cronbach’s alphas for the subscales range from .79 to .88 (Clark et al., 1991). Predictive validity was supported by Andrade et al. (2010), Clark et al. (1991), and Warziski, Sereika, Styn, Music, and Burke (2008) who found the scale accurately predicted weight loss. In the present study, the total WEL scale was used and had a total Cronbach’s alpha of .94.

Procedure

Figure 1 shows a flow chart of the randomised control trial design. Prior to beginning the study, participants were reminded that participation was voluntary and they could withdraw at any time. Clicking on a “Proceed to study” button constituted informed consent. Participants completed the pre-intervention baseline measures at Time 1 and were asked to provide an email address so they could be sent a link to return in a week’s time and complete the second part of the study at Time 2. To ensure anonymity, participants’ email addresses were collected via a conduit, disconnected from any data collected. Time 1 and 2 responses were match using a unique code based on several questions answered by the participants. Typical questions might provide parts of the code such as the first two letters in the town/city you were born in and the last two letters of your mother’s maiden name.
One week later, participants followed the email link to complete the study. Participants were randomly allocated to one of three conditions: (a) reading a half page essay on uncontrollable factors contributing towards obesity, (b) reading a half page essay on controllable factors contributing towards obesity, and (c) control (not required to read anything). Essay information was sourced from the Australian Government Department of Health (2009), NSW Department of Health (2013), and partially utilised the weight controllability information by Lippa and Sanderson (2013). In the uncontrollable condition, the information given showed that the environment (e.g., factors in society such as food prices favouring unhealthy food and...
advertisements), and not the individual, was to blame for weight and that weight was due to
genes (e.g., scientific evidence). Meanwhile, in the controllable factors condition, the
information given emphasised that weight is under personal control (e.g., diet, exercise) and, as
such, a treatable condition. The uncontrollable and controllable material presented was matched
in terms of being backed by science, with one suggesting ‘forced’ lifestyle choices and the other
suggesting ‘unforced’ lifestyle choices. To make sure that participants had engaged in the
material presented, they were asked two questions based on the material corresponding to the
intervention as a manipulation check. Two participants failed to answer these two questions and
were eliminated from any analysis. At post-intervention, participants completed the same
measures, presented in random order, as at Time 1. Participants were fully debriefed at the
conclusion of the study and provided with further information on obesity as required.

Results

Negative attitudes towards obesity were examined at Time 1 and found to be high ($M =
3.37, SD = 0.79$) and statistically different from the weight stigma score of 2.50 as suggested by
Puhl et al. (2009), $t(446) = 23.18, p < .001$, with a large effect size Hedges’ $g = 1.10$. This
attitude was found to be present in 81% or 362 of the 447 participants, suggesting a high
prevalence of negative attitudes toward people with obesity. The same pattern of findings was
observed when controlling for sex and were of similar magnitude for Time 2, Hedges’ $g = 1.32$
and prejudice towards obesity present in 90% of participants.

At Time 1, Spearman’s rho indicated that prejudice towards obesity was negatively
related to exercise and healthy eating self-efficacy. Table 1 shows that the higher the prejudice,
the lower the level of exercise self-efficacy and healthy eating self-efficacy. In addition, the
greater the exercise self-efficacy, the greater the healthy eating self-efficacy.
Table 1 also showed that, (a) the healthier a person’s rating of their weight perception, the lower their level of prejudice towards obesity, and (b) the healthier a person’s weight perception, the higher they rated their exercise self-efficacy and healthy eating self-efficacy.

Table 1

Summary of Spearman’s rho Correlation Results at Time 1 (N = 447)

<table>
<thead>
<tr>
<th>Measure</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Prejudice towards obesity (fat phobia)</td>
<td>-</td>
<td>-.15**</td>
<td>-.20***</td>
<td>-.11*</td>
</tr>
<tr>
<td>2. Exercise self-efficacy</td>
<td>-</td>
<td>.47***</td>
<td>.39***</td>
<td></td>
</tr>
<tr>
<td>3. Healthy eating self-efficacy</td>
<td>-</td>
<td></td>
<td>.47***</td>
<td></td>
</tr>
<tr>
<td>4. Weight perception</td>
<td></td>
<td></td>
<td></td>
<td>-</td>
</tr>
</tbody>
</table>

*Note. The same pattern of findings was observed within males and females. Weight perception = the higher the score the more positive the weight perception.

*p < .05, **p < .01, ***p < .001

To determine whether weight controllability information altered levels of prejudice towards obesity, a one-way ANCOVA compared the post-intervention FPS scores of the three experimental conditions while controlling for pre-intervention scores (see Table 2). The information had no statistically significant effect on prejudice levels at post-intervention, $F(2,342) = 0.83, p = .435$, partial $\eta^2 < .01$. Furthermore, there was no significant effect on the level of exercise self-efficacy, $F(2,342) = 1.04, p = .356$, partial $\eta^2 = .01$ or healthy eating self-efficacy, $F(2,342) = 0.04, p = .961$, partial $\eta^2 < .01$. Examining the information effect within males and females showed a medium effect size, but no statistical significance, in relation to prejudice, $F(2,45) = 2.36, p = .106$, partial $\eta^2 = .10$, whereby males in the controllable condition tended to have lower prejudice than their counterparts in the uncontrollable condition, $p_{\text{Sidak}} = .104$. Examining sex as a factor did not show any sex by condition interactions for any outcome.
Table 2

Summary of the Pre-intervention and Post-intervention Means and Standard Deviations of Prejudice towards Obesity (PO), Exercise and Healthy Eating Self-efficacy (ESE), and Weight Efficacy Lifestyle (WEL) Levels by Conditions (N = 346)

<table>
<thead>
<tr>
<th></th>
<th>Pre-intervention (M, SD)</th>
<th>Post-intervention (M, SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Controllable</td>
<td>Uncontrollable</td>
</tr>
<tr>
<td>PO</td>
<td>3.34 (0.84)</td>
<td>3.39 (0.78)</td>
</tr>
<tr>
<td>ESE</td>
<td>91.86 (40.82)</td>
<td>84.49 (37.26)</td>
</tr>
<tr>
<td>WEL</td>
<td>6.08 (1.67)</td>
<td>5.81 (1.67)</td>
</tr>
</tbody>
</table>

Note. Controllable information (n = 109); Uncontrollable information (n = 122); Control condition (n = 115)

Post hoc analyses were also conducted exploring age, sex, and education. The younger the participant, the more healthy they rated their weight perception, $r_s(445) = -.10$, $p = .032$ (two-tailed), and the older the participant the higher their level of prejudice towards obesity, $r_s(445) = .14$, $p = .003$ (two-tailed). Also, the more educated the participant, the higher their level of prejudice, $r_s(445) = .11$, $p = .025$ (two-tailed). The sex of participants was found to be unrelated to either weight perception, level of prejudice towards obesity, exercise, or healthy eating self-efficacy.

Discussion

Based on the weight stigma score suggested by Puhl and Heuer (2009), the current study confirms the pervasiveness of prejudice towards obesity in a well-educated sample. The high prevalence of prejudice, with 81% of the sample scoring higher than 2.50 at Time 1, combined with the fact that research has found it is harmful to people’s health (Sutin & Terraciano, 2013;
Wott & Carels, 2010), confirms the importance of researching interventions aimed at reducing its occurrence.

The present study hypothesised that participants’ levels of prejudice toward obese people would be related to their own exercise and healthy eating self-efficacy levels. This relationship has not previously been investigated and is, therefore, exploratory in nature. This hypothesis was supported with a significant negative relationship found between prejudice, exercise, and healthy eating self-efficacy. Thus the higher the participant’s level of prejudice, the lower their levels of exercise and healthy eating self-efficacy. High self-efficacy (i.e., exercise and weight) may indicate underlying happiness and wellbeing that in turn promotes increased tolerance and less prejudice towards individuals that are different from you. Furthermore, if you are happy about your own situation (e.g., weight) you may feel sorry for those that are less fortunate than you. A small but significant negative relationship between participants’ weight perception and their levels of prejudice towards obesity was found. Thus the healthier a person rated their weight, the lower their level of prejudice. This is an interesting finding given that healthy weight individuals should be more likely to consider weight as controllable and therefore be unsympathetic to those unable to successfully control their own weight. However, this was not demonstrated in the current study. This finding should be interpreted with caution, though, given that the relationship was small ($r = -.11$) and the potential concerns relating to the accuracy of reported weight (especially in women) found in some research (e.g., Engstrom, Paterson, Doherty, Trabulsi, & Speer, 2003).

Additionally, a significant positive relationship between participants’ weight perception and levels of exercise and healthy eating self-efficacy was found indicating that the healthier a person rated their own weight, the higher their own level of exercise and healthy eating self-
efficacy. This was consistent with a strong positive relationship between exercise and healthy
eating self-efficacy. These relationships suggest that there may be a ‘general’ efficacy factor
explaining the correlation between exercise and weight efficacy.

The current study also predicted that information emphasising the controllable
contributors toward obesity (i.e., explaining how obese people are to blame) would increase
prejudice, while information emphasising the uncontrollable contributors toward obesity (i.e.,
explaining how obese people are not to blame) would reduce prejudice. Weight controllability
beliefs information had no effect on levels of prejudice in either the controllable or
uncontrollable conditions when compared to a control. Therefore, this hypothesis was not
supported.

The absence of change in prejudice levels in response to weight controllability beliefs
information indicates that attribution theory alone does not explain or alter prejudice towards
obesity. Weight controllability attributions could play a role in the development of prejudice
towards obesity. However, this relationship is complex and mediated by other variables yet to be
fully understood. This is demonstrated through studies finding that weight controllability beliefs
information reduces negative trait ratings but fails to improve positive trait ratings (Puhl et al.,
2005), that changes in causal beliefs resulted in no changes in prejudice levels (Lippa &
Sanderson, 2013), and that while reduced causal beliefs about obesity and improved prejudice
levels occur post-intervention, these levels return to baseline levels mere weeks later (Swift et
al., 2013). Several different techniques for altering controllability beliefs have been attempted
including lectures, weekly tutorials, and videos, but no weight controllability beliefs intervention
has yet consistently demonstrated altered levels of prejudice towards obesity (Danielsdottir et al.,
2010). However, the focus needs to be on the message delivered. A recent study reported that if
the overweight person was seen to be putting in the effort they might be subjected to less prejudice (Black, Sokol, & Vartanian, 2014). Finally, the finding that weight controllability information did not alter people’s levels of exercise or healthy eating self-efficacy for the worse is reassuring to any potential incorporation of weight controllability beliefs information into future interventions. The lack of support for this hypothesis should not necessarily mean that it is not a potentially useful method for reducing prejudice towards obese people. Future research may merely need to consider a manipulation that more emphatically emphasises weight controllability beliefs information.

The present study also tested whether weight controllability beliefs information used in interventions designed to reduce prejudice towards obesity would influence participants’ levels of self-efficacy in managing their own weight. The hypothesis that information emphasising controllable contributors toward obesity would increase exercise and healthy eating self-efficacy and information emphasising uncontrollable contributors toward obesity would reduce exercise and healthy eating self-efficacy when compared to a control condition was not supported. Weiner et al. (1988) noted that educating people about the uncontrollable determinants of obesity could create a dilemma. When interventions attempt to reduce personal responsibility for obesity, they do not promote personal change, nor do they support self-efficacy in performing healthy behaviours. Therefore, the impact of interventions on people’s ability to manage their own weight should be vigilantly monitored in future. Even if personal responsibility for obesity status is reduced, this should not be considered incongruent with personal responsibility for healthier lifestyle choices such as an active life (e.g., walking, gardening, not sitting at work). This is supported by findings suggesting that lack of personal responsibility for weight could potentially increase food consumption (Dar-Nimrod et al., 2014).
Finally, in line with the arguments presented by Haidt (2001), prejudice may simply be the judgement given by participants unaffected by any education (i.e., the intervention in the present study) about factors related to obesity. At the same time researchers may try to use obesity education to understand prejudice while failing to see that education may have very limited effects on prejudice, if any.

The level of prejudice seemed to increase from Time 1 to Time 2 by nine percentage points. A comparison of participants’ demographics between Time 1 and Time 2 does not suggest that the two samples are very different though it should be noted that the attrition for males was 31.9% while it was 20.8% for females. It is possible that participants who felt more strongly about the issues explored in the present study were more likely to complete both time periods. However, given the overall lack of impact by the manipulation it is unlikely that it affected this outcome. The post hoc analyses suggested that the lower the prejudice towards obesity the (a) younger the participants, (b) better the weight perception, and (c) lower the education. These are not exactly robust findings as each explained less than 2% of the variance in prejudice and do not seem consistent with the literature or perceptions in society (e.g., Latner, Stunkard, & Wilson, 2005). Variations in the relationship to prejudice across studies might reflect different samples and assessment procedures but these relationships need to be examined further, potentially through a systematic review that can tease out such differences.

Limitations and Future Recommendations

The present study contained a high proportion of well-educated female participants suggesting that its findings should not be generalised to the Australian population as a whole. Future research could benefit from investigating healthy weight and unhealthy weight participants of both sexes to further explore how self-efficacy and weight perception are related
to prejudice towards obesity. Research also needs to explore how coping with this kind of prejudice could be related to the perpetuation of more prejudice. BMI was not assessed due to the unreliability of self-reported weight and height (e.g., Rothman, 2008). As an alternative, we assessed weight perception given that it is potentially an important factor in prejudice (Major et al., 2014). However, measuring BMI and/or some type of waist to height ratio measure would be beneficial in future studies. The control condition does not control for reading a short ‘essay’ unrelated to weight issues but it does allow control for time passed and effects of reading the different questionnaire items. This suggests that future studies should consider employing a similar but unrelated manipulation in the control condition.

Conclusion

Western culture is currently facing a dilemma whereby our cultural value for thinness is pitted against rising obesity rates. Prejudicing obese individuals does not support healthy behaviour and exacerbates their health issues (Drury & Louis, 2002; Vartanian & Novak, 2011; Wott & Carels, 2010). Research is urgently needed to tackle the ubiquitous, publicly acceptable, and ultimately harmful practice of prejudicing people who are overweight or obese. The present study suggests that increasing self-efficacy for exercise and healthy eating may be important in reducing prejudice.


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