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Prime and prejudice: Brief stereotypical media representations can increase prejudicial attitudes and behaviour towards people with schizophrenia.

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Abstract

Prejudice against people with mental illnesses remains a significant problem in the UK and in many other countries despite sustained efforts by governments and charities. This is particularly so for people with schizophrenia, who are seen as dangerous and unpredictable. The present study investigated the effect of brief, casual, stereotypical representations on prejudice and behavioural intentions towards people with schizophrenia. Participants were exposed to three Halloween costumes in an online environment under the guise of product research. In the experimental condition, one of the three costumes was a 'Psycho Ward' outfit identical to one sold online by a leading supermarket chain in the UK. Participants in the control condition saw an unrelated costume. Exposure to the Psycho Ward outfit resulted in more negative behavioural intentions towards people with schizophrenia, mediated by increased prejudice. These findings confirm and extend earlier research that implicates adverse media stereotypes in the persistence of prejudice against people with mental illness. More research is warranted on the relative effects of different influences on community attitudes to mental illness.

Key words: prejudice; behavioural intentions; stereotypes; schizophrenia; mental illness; online

Prime and Prejudice: Brief stereotypical media representations can increase prejudicial attitudes and behaviour towards people with schizophrenia.

In March 2017, members of the British Royal Family launched a project called 'Heads Together' with the aim of 'shattering the stigma' against mental illness (Booth, 2017); the latest such initiative in the UK. Time to Change (TTC; a consortium body supported by a number of mental health charities) has been campaigning since 2007 to end the stigma and discrimination faced by people in England who experience mental health problems (Time to Change, 2017).

An interim evaluation of the TTC campaign concluded that the results were mixed despite clear objectives, substantial funding and the support of the mental health charities (Smith, 2013); whilst attitudes and behavioural intentions towards people with mental illness in England had improved, reported behaviour had not (Evans-Lacko, Henderson & Thornicroft, 2013). A more recent review of the TTC campaign (Henderson et al., 2016) identified improvements in knowledge about and attitudes towards people with mental illness in England but acknowledged that this was not uniform across the population and may not apply equally to all mental illnesses. This unreliable progress is consistent with international experience; a meta-analysis by Schomerus et al. (2012) of studies over the previous twenty years across nine first-world countries found that community knowledge about mental illnesses had increased but social acceptance of people with mental illness had not shown any corresponding improvement. In some instances, and specifically for schizophrenia, stigma had increased.

Whilst public interest campaigns such as Heads Together and TTC seek to reduce stigma against mental illness, any positive effect may be undermined by casual,

apparently innocuous, stereotypical representations of people with mental illness. In October 2013, UK supermarket chains Asda and Tesco sold Halloween costumes described respectively as ‘Mental Patient’ and ‘Psycho Ward’ outfits that provoked widespread condemnation from mental health charities, in national newspapers (Masters, 2013; Smithers, 2013) and on television (BBC News, 2013). Following the outcry, both supermarkets apologised and removed the offending items from sale. Nevertheless, a spokesman for the Prime Minister’s office subsequently appeared to defend the costumes, observing, “Halloween is an opportunity to have some fun. Shops are entitled to respond to consumer demand” (Holehouse, 2014). The current research was designed to assess whether such stereotyped images have a significant impact on prejudicial attitudes and behaviour towards people with schizophrenia.

Prejudice against People with Mental Illness

It is difficult to confidently quantify the level of public stigma against people with mental illness. In a national public survey in England in 2015 (Henderson et al., 2016; $N = 1,736$), less than 30% of respondents agreed strongly or slightly with a range of items reflecting negative attitudes about people with mental illness (e.g. ‘Anyone with a history of mental problems should be excluded from taking public office’) whilst more than 70% agreed with range of positive statements (e.g. ‘People with mental illness have for too long been the subject of ridicule’). The authors acknowledge, however, that these explicit measures could be influenced by a social desirability bias. In contrast, a national survey of mental health patients themselves (Corker et al., 2016; $N = 902$) conducted in England in 2014 found that 87% had experienced some prejudice. This may represent a better indication of the prevalence of stigma against people with mental illness.

However widespread negative attitudes amongst the public, the adverse impact of stigma on people with mental illness has been widely confirmed. This prejudice can lead to low self-esteem and social withdrawal (Link, Struening, Neese-Todd, Asmussen & Phelan, 2001), lower educational attainment (Suhrcke & de Paz Nieves, 2011), limited opportunities (Social Exclusion Unit, 2004), and reduced life expectancy (Chesney, Goodwin & Fazel, 2014). This prejudice is often internalised by those with mental illness such that they themselves share the negative views about their condition that are held by society at large (Corrigan et al., 2010). The stigma represents an obstacle to effective treatment (Tallant, 2015); people with a mental illness frequently choose to keep it a secret (Corrigan & Rao, 2012) discouraging them from seeking treatment (Jennings et al., 2015; Link & Phelan, 2006).

Prejudice against people with schizophrenia is typically greater than for many other mental illnesses (Angermeyer & Dietrich, 2006; Crisp, Gelder, Goddard & Meltzer, 2005). This is driven in particular by the belief that people with schizophrenia are more dangerous and more unpredictable than people with other mental illnesses, and compounded by the belief that the condition is less amenable to treatment (Crisp et al., 2005). The Asda and Tesco Halloween outfits both presented threatening representations of someone with a mental illness. The Asda Mental Patient costume comprised a torn, bloodstained shirt, plastic meat cleaver and gory face mask (Urquhart, 2013). Tesco's Psycho Ward outfit featured an orange boiler suit with the words 'Psycho Ward' on the chest and back, a large syringe and a plastic jaw restraint together with the suggestion that customers should 'complete the look' by also purchasing a plastic machete (BBC News, 2013).

Media Stereotypes and Attitudes to Mental Illness

Previous research has pointed to an adverse impact of media portrayals on community attitudes and behaviour towards the mentally ill (Wahl, 1992; Sieff, 2003) reflecting both the frequency and negativity of depictions of mental illness in the media (McGinty, Kennedy-Hendricks, Choksy & Barry, 2016; Wahl, 2003). Stigmatising coverage of mental illness has been identified across a range of media including magazines (Wahl, Borostovik & Rieppi, 1995), radio (Brooks, 2009), television (Parrott & Parrott, 2015) and cinema (Byrd & Elliot, 1985). The evidence suggests that community attitudes to mental illness are appreciably influenced by the cumulative effect of this media exposure (see Pirkis & Francis, 2012, for a review). This negative depiction is particularly true of schizophrenia, where both entertainment (Owen, 2012) and news media (Clement & Foster, 2008; Gwarjanski & Parrott, 2017) frequently associate the condition with violent incidents.

A number of experimental studies have indicated a causal link between media portrayals in either film (Domino, 1983; Wahl & Lefkowitz, 1989) or newspaper content (Corrigan, Powell & Michaels, 2013; Dietrich, Heider, Matschinger & Angermeyer, 2006; Thornton & Wahl, 1996) and attitudes to mental illness. These experimental studies involved either exposure to dramatised depictions of mental patients (e.g. the film 'One flew over the cuckoo's nest'; Domino, 1983) or newspaper reports of real life violent crime by mental patients (e.g. the rape and attempted murder of a seven year-old child; Dietrich et al., 2006). The current study tested whether stereotypical representations of mental patients could have a similar impact in a less affectively intense, more transactional, commercial environment.

Stereotypes, Prejudice and Behavioural Intentions

Corrigan, Markowitz, Watson, Rowan and Kubiak (2003) outline three components of stigma against people with mental illness; *stereotypes* that they are dangerous and responsible for their illness that can generate *prejudicial attitudes* amongst those who endorse these negative stereotypes that may in turn lead to *behavioural responses* in the form of coercion, segregation, hostility or avoidance. West, Hewstone and Lollot, (2014) demonstrated that prejudice mediates the effect of social contact on behavioural intentions towards people with schizophrenia. Prejudice may also mediate the effect of stereotypical representations on behavioural intentions towards people with schizophrenia.

The Current Research

The current research investigated the effect of exposure to stereotype-based costumes on prejudice against and behavioural intentions towards people with schizophrenia. Specifically, we hypothesised that participants who were exposed to the Psycho Ward costume would report more prejudice, and more negative behavioural intentions to people with schizophrenia than participants exposed to a neutral Halloween outfit. Further, we hypothesised that the increase in negative behavioural intentions from exposure to the Psycho Ward costume would be mediated by increased prejudice against people with schizophrenia.

This study also aimed to replicate the circumstances under which many consumers would have viewed the original Mental Patient and Psycho Ward costumes. These costumes were sold on Asda and Tesco's online websites, suggesting that many consumers experienced a relatively brief, online exposure to them. Similarly, the current

experiment was also completed online and involved only a brief exposure to the Psycho Ward costume. The study was carefully disguised as consumer research where participants were required to assess their likelihood to buy the Halloween outfits thus imitating their likely cognitive processes had they been viewing the original websites.

Method

Participants and Design

One hundred British participants (62 male, 38 female; $M_{age} = 24.0$ years, $min = 18$, $max = 60$, $SD = 6.6$) were recruited primarily via internet fora and social media. This was a between-subjects experimental design with type of Halloween costume as the independent variable and two dependent variables; prejudice and behavioural intentions towards people with schizophrenia.

Procedure

Participants were randomly assigned to one of two conditions; one in which they saw Tesco's Psycho Ward costume (experimental condition, $n = 50$) and one in which they saw a costume that was not based on stereotypes of other groups (control condition, $n = 50$). The questionnaire was hosted online by Qualtrics. Participants were asked to rate the costumes and completed measures of the dependent variables. They were thanked, fully debriefed, and offered modest monetary compensation (c. £1.50) for completing the study.

Materials and Measures

To hide the true hypotheses, we told participants only that the study was investigating responses to Halloween costumes. All participants received a survey with pictures of three Halloween costumes. Two costumes were the same for all participants; a

witch and a vampire. The third costume was the Tesco Psycho Ward outfit in the experimental condition and a pumpkin outfit in the control condition. We asked participants to indicate on a 5-point scale (1 = *Not at all*, 5 = *Very much*) whether each costume was 'interesting', 'creative', 'innovative', and 'whether you would wear this costume'. These items were not analysed, and were only used to reinforce the disguise.

We measured prejudice against people with schizophrenia with nine items ($\alpha = .85$) adapted from the attribution questionnaire used by Corrigan et al. (2002). Participants responded to the following statements using 7-point Likert scales (1 = *not at all*, 7 = *very much*); 'I think persons with schizophrenia pose a risk to other people unless they are hospitalized', 'Persons with schizophrenia terrify me', 'How scared of a person with schizophrenia would you feel?', 'How frightened of a person with schizophrenia would you feel?', 'I would try to avoid a person with schizophrenia' (1 = *definitely*, 7 = *definitely not*; reversed), 'I would feel unsafe around persons with schizophrenia' (1 = *strongly agree*, 7 = *strongly disagree*; reversed), 'How dangerous do you feel a person with schizophrenia is?', 'I would feel threatened by a person with schizophrenia' and 'If I were a landlord, I probably would rent an apartment to a person with schizophrenia' (1 = *definitely*, 7 = *definitely not*). Factor analysis of the nine items revealed two factors with eigenvalues greater than one; eight items loaded onto the first factor and just one item ('If I were a landlord...') on the second. Cronbach's alpha increased with the latter item removed ($\alpha = .92$) so the analysis used this revised eight item scale.

To measure negative behavioural intentions toward people with schizophrenia, we used the behavioural intentions scale from Tam, Hewstone, Kenworthy, and Cairns. (2009; see also West & Bruckmüller, 2013). Participants indicated on 7-point Likert

scales (1 = *not at all*, 7 = *very much*) the likelihood that they would react in each of the following nine ways ($\alpha = .77$) to someone with schizophrenia; ‘talk to them’ (reversed), ‘avoid them’, ‘confront them’, ‘find out more about them’ (reversed), ‘keep them at a distance’, ‘argue with them’, ‘spend time with them’ (reversed), ‘have nothing to do with them’, and ‘oppose them’. Factor analysis (with varimax rotation, converging in 5 iterations) revealed three factors with eigenvalues greater than one, representing 74% of the total variance. The three factors, each with three items, neatly reflecting the three subscales representing aggressive (13% of variance), avoidant (21% of variance) and approach (40% of variance) behavioural tendencies towards people with schizophrenia. Since the objective of the research was to identify a possible adverse effect on behavioural intentions, rather than analyse the nature of any such effect, these nine items were retained as a single variable for the analysis¹.

After completing the dependent measures, participants provided their age and gender. None of the participants indicated any history of psychosis-related mental health problems. None said that they had guessed the study’s true hypotheses.

Results

There was no missing data on any measured variable. The relationship between prejudice and behavioural intentions was linear and homoscedastic. Both variables were approximately normally distributed. No univariate or multivariate outliers were identified.

Effects of the Stereotype-Based Costume

We hypothesised that participants who were exposed to the stereotype-based costume would report more prejudice and more negative behavioural intentions towards

people with schizophrenia. These effects were investigated using a multivariate ANOVA with condition as the independent variable and prejudice and behavioural intentions as dependent variables.

We found the hypothesised multivariate effect of stereotype-based costumes, $F(2, 97) = 13.03, p < .001, \eta_p^2 = .21$. As expected, compared to those in the control condition, participants who were exposed to the stereotype-based costume reported more prejudice, $F(1, 98) = 30.94, p < .001, \eta_p^2 = .21$, and more negative behavioural intentions, $F(1, 98) = 11.34, p = .001, \eta_p^2 = .10$. Means and standard deviations are shown in Table 1.

Age did not predict either of our dependent variables ($.08 < p\text{'s} < .33$) and was not considered further in any of our analyses. Male participants, compared to female participants, reported more prejudice ($M_M = 3.21$ vs. $M_F = 2.68; t(98) = 2.28, p = .02$), and more negative behavioural intentions ($M_M = 2.95$ vs. $M_F = 2.57; t(98) = 2.09, p = .04$). Males and females were not unevenly distributed between our conditions, $\chi^2(1) = 1.53, p = .22$. Nevertheless, reflecting the different scores on the two dependent variables, gender was included as a covariant in the subsequent mediation analysis. Correlations are shown in Table 2.

Mediation Analysis

We tested the hypothesis that the effect of stereotype-based costumes on negative behavioural intentions toward people with schizophrenia would be mediated by an increase in prejudice using Preacher-Hayes Model 4 with gender as a covariate (95% confidence interval and 1,000 bootstrap samples; Hayes, 2017). Standardised z-scores were used for the continuous variables.

We found the hypothesised mediated relationship (see Figure 1). Exposure to stereotype-based costumes increased prejudice ($b = .87, p < .001$). Prejudice led to more negative behavioural intentions ($b = .61, p < .001$). The total effect of costume on behavioural intentions without mediation was significant ($b = .60, p = .002$) and accounted for 13% of the total variance ($R^2 = .132$). When prejudice was introduced as a mediator, the direct effect of costume on behavioural intentions ceased to be significant ($b = .07, p = .69$). The total indirect effect of exposure to stereotype-based costumes on negative behavioural intentions was positive and significant ($b = .53; LLCI = .26, ULCI = .71$). Prejudice mediated almost 90% of the total effect ($P_M = .88$). Since the continuous variables had been standardised prior to the analysis this implies that the indirect effect of stereotype-based costumes increased negative behavioural intentions towards people with schizophrenia by approximately .5 standard deviations.

Since one item on the prejudice scale was ‘avoid them’ and one of the three subscales on the behavioural intention measure was also ‘avoid’, we tested the overlap between these two measures. A factor analysis covering all 17 items across both measures did reveal a moderate correlation between the prejudice factor and the avoidance subscale ($r = -.48$). We repeated the mediation analysis using a revised 6-item measure of behavioural intentions that excluded the three items of the avoid subscale. Whilst some of the specific coefficients were somewhat changed, the overall mediation model was not affected.

Discussion

We investigated the effect of a brief, online exposure to stereotypical images of mental patients on attitudes and behavioural intentions towards people with

schizophrenia. Exposure to a Psycho Ward costume significantly increased prejudice and adversely affected behavioural intentions towards people with schizophrenia. Moreover, the research confirmed our hypothesis that the effect of such representations on behavioural intentions was completely mediated by prejudicial attitudes. The research indicates that the Psycho Ward outfit should not be dismissed as a bit of harmless Halloween fun.

These results are consistent with previous experimental research which shows the impact of media representations on attitudes and behaviour towards the mentally ill. However, unlike previous research which focussed on entertainment (Domino, 1983; Wahl & Lefkowitz, 1989) or news articles (Corrigan et al., 2013; Dietrich et al., 2006; Thornton & Wahl, 1996), our research presented a stereotyped image of schizophrenia in a more innocuous, emotionally anodyne, commercial context. In the current study, the connection between the stimulus and mental illness was carefully disguised, more fleeting and presented in a way that was similar to the original Psycho Ward costume. Nevertheless, the impact on prejudice and behavioural intentions remained significant.

In the control group, scores for prejudice ($M = 2.16$, $SD = 1.13$) and negative behavioural intentions ($M = 2.43$, $SD = .92$) were both below the mid-point on a Likert scale of 1-7. This may not seem consistent with a high level of prejudice against people with schizophrenia. These low scores may simply reflect the suppression effect of an explicit measure of prejudice. However, what was pertinent for the purposes of the current study was the experimental effect between the control and Psycho Ward conditions.

There has been justified criticism of the reliance of much research, particularly in Social Psychology, on narrowly based undergraduate samples (Henrich, Heine & Norenzayan, 2010). The current study was not targeted at students and represented a good range of ages ($min = 18$ years, $max = 60$). The relatively young mean age of respondents ($M_{age} = 24.0$, $SD = 6.6$) reflected the recruitment method (via the internet and social media) and the nature of the survey (Halloween costumes). This is also a key audience for anti-stigma campaigns since negative attitudes to mental health in the UK are most prevalent amongst 16-24 year olds (Crisp et al., 2005).

The current study was presented as a market research exercise. As far as we can ascertain, none of the participants guessed prior to debrief that the true focus of the research was attitudes to mental illness. Nevertheless such subtle supraliminal priming can still influence attitudes and behaviour. Mange, Chun, Sharvit and Belanger (2012) demonstrated that linguistic priming of Muslim and Arab constructs reduced reaction latencies amongst European-American participants in a shooter game involving targets of ambiguous religion/ethnicity. Indeed, even subliminal priming has been shown to influence attitudes and behaviour (Bargh, 2005). Moreover, such effects can persist; Higgins, Rholes and Jones (1977) found that primed attitudes about a target were maintained for two weeks. The longer term impacts depend on a range of factors including individual differences, relevance to current goals, and the valence and frequency of activation (see Higgins, 2011 for a review). In principle, therefore, we should expect that stereotypical representations such as the Psycho Ward outfit will have some aggregate adverse effect on long term public attitudes and behaviour towards people with schizophrenia.

Limitations and Future Research Directions

The current study used an explicit measure of prejudice. Since Greenwald, McGhee and Schwartz (1998) developed the Implicit Association Test (IAT), there has been much focus on implicit measures of prejudice. Nevertheless, most research on mental illness has used explicit measures of prejudice (see Angermeyer & Dietrich, 2006). Rüsçh, Corrigan, Todd and Bodenhausen (2011) found that higher implicit public prejudice against people with mental illness was positively associated with higher explicit measures of anger against them. However, reviewing nineteen studies where both measures had been included, Robb and Stone (2016) concluded that the relationship between implicit and explicit prejudice against people with mental illness was inconsistent. It is possible, therefore, that an implicit measure of prejudice in the current research may have yielded different conclusions.

Our research measured behavioural intentions, but not actual behaviour. The effect of behavioural intentions on actual behaviour may be complex. Angermeyer and Dietrich (2006) concluded that little was known about the relationship between attitudes to people with mental illness and behaviour towards them. Evans-Lacko et al. (2013) identified discrepancies in trends between intended and reported behaviour towards people with mental illness in England between 2009 and 2012; whilst behavioural intentions improved significantly over this period, reported behaviour did not. This may simply reflect a lag between the change in attitudes and intentions and any positive impact on actual behaviour.

Whilst the current study demonstrated the impact of casual stereotypical representations such as the Tesco Psycho Ward outfit, it is also important to understand

how these fit within the wider battle to shape public attitudes to mental illness in general and schizophrenia specifically. Although such representations may aggravate stigma against people with mental illness, they are counteracted by more positive and objective information disseminated by campaigns such as Heads Together and TTC. Past experimental research balanced stigmatizing portrayals with more objective, prophylactic messages (Domino, 1983; Thornton & Wahl, 1996, Wahl & Lefkowitz, 1989). However, these failed to mitigate the damaging effects on attitudes to mental illness. At a macro level, Schomerus et al. (2012) have shown that, even as populations become more knowledgeable about mental illness, stigma against mental illness does not necessarily decrease. Further research should explore the relative frequency and potency of these competing messages and their respective influence in determining prevailing attitudes and behaviour.

Given the growth in internet usage (OFCOM, 2016), it seems probable that the internet will increasingly be a key conduit for social norms across a wide range of topics, including attitudes to mental illness. One study by Reavley and Jorm (2010) reviewed the information websites devoted to mental illnesses and found them to be of variable quality. Furthermore, such sites are only likely to be consulted by those proactively searching for such information and ignores the huge range of commercial, political and personal online content that may also influence societal attitudes. More research is required to assess both the quantity and the degree of stigmatization of views and information about mental illness across the Web and on social media.

Conclusions

Prejudice against people with a mental illness causes considerable detriment both to those directly affected and to society at large. Despite sustained efforts on behalf of governments, charities and other opinion leaders, stigma against people with mental illnesses, and particularly schizophrenia, has remained a persistent problem in the UK and internationally. Our study shows how these efforts can be undermined by ostensibly benign stereotypical portrayals. It is discouraging to note that, despite the outcry against and prompt withdrawal of the outfits by Tesco and Asda, similar stereotypical mental patient Halloween costumes are still readily available on the internet (Fancydress.com, 2017; Escapade.co.uk, 2017). This research offers important evidence of the harmful effects of these negative representations.

Note

1. Using the subscales for aggress, approach and avoid as separate dependent variables did not change the conclusions of the subsequent mediation analysis compared with the single measure of behavioural intentions.

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Table 1

Means and standard deviations of prejudice and negative behavioural intentions against people with schizophrenia.

<u>Group</u>	<u>Prejudice</u>		<u>Behavioural Intentions</u>	
	M	SD	M	SD
Experimental	3.28	1.05	3.00	.77
Control	2.16	1.13	2.43	.92

Table 2

Correlations and descriptive statistics for all variables

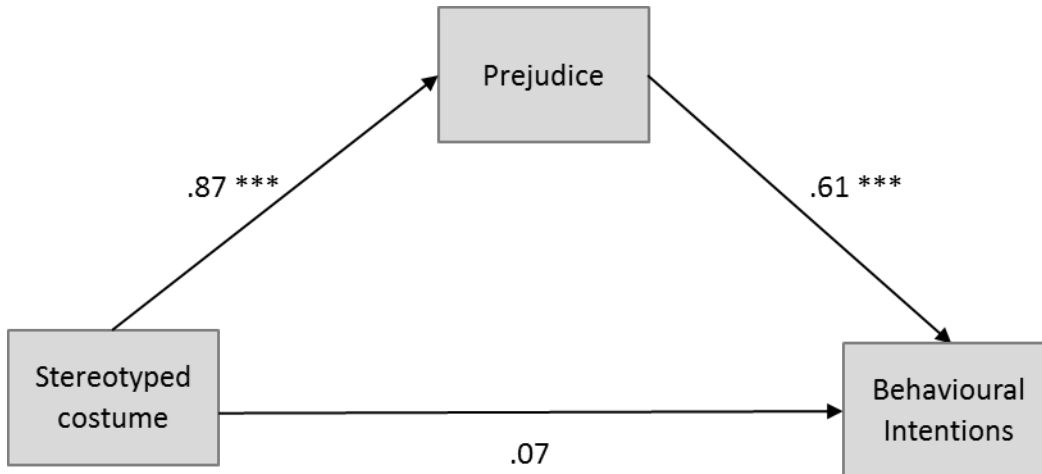
	<i>M</i>	<i>SD</i>	1	2	3	4	5
1. Costume	.50	.50	-				
2. Age	24.0	6.63	-.06	-			
3. Gender	1.38	.49	.12	.10	-		
4. Prejudice	2.72	1.22	.46***	.01	.22*	-	
5. Behavioural intentions	2.71	.89	.32***	.17	.21*	.64***	-

Note. Costume; 0 = control, 1 = 'psycho ward'. Gender; 1= female, 2 = male.

* $p < .05$; ** $p < .01$; *** $p < .001$.

Figure 1

Effects of stereotyped costume on behavioural intentions mediated by prejudice with gender as a covariate.



Note. Prejudice and Behavioural intentions both standardised prior to analysis.
* $p < .05$; ** $p < .01$; *** $p < .001$.