

# GAY MEN'S STEREOTYPE ENDORSEMENT AND WELL-BEING

Exploring the relationship between gay men's self- and meta-stereotype endorsement with  
well-being and self-worth

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Stereotypes typically have negative impacts on stigmatized minority groups, especially when endorsed by members of that group. This paper examines the prevalence and consequences of stereotype endorsement on well-being within the gay community. Specifically, we explored how gay men's self-stereotype (i.e., personal beliefs about the stereotypes pertaining to one's in-group) and meta-stereotype (i.e., believing that out-group members endorse stereotypes pertaining to one's in-group) endorsement would be related to mental and cognitive well-being. The sample of 253 gay male participants (aged 18 - 78 years;  $M = 38.25$ ,  $SD = 13.51$ ) completed an online questionnaire assessing demographics, self- and meta-stereotype endorsement, mental well-being (depression, anxiety, stress), and cognitive well-being (life satisfaction, self-worth) measures. We found evidence that our sample endorsed both self- and meta-stereotypes, with meta-stereotypes being endorsed more strongly than self-stereotypes. Regression analyses revealed a unique pattern of findings about the consequences of endorsing stereotypes: increases in self-stereotyping predicted decreases in mental well-being, whereas increases in meta-stereotyping predicted decreases in cognitive well-being. Limitations and future directions are discussed.

*Keywords:* gay men; gay male; meta-stereotypes; stereotype endorsement; well-being; self-worth.

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The acceptance of sexual minorities (at both the individual and community level) has become increasingly common in recent times. There have been documented decreases in negative attitudes toward gay men and lesbian women across most parts of the globe (Herek & McLemore, 2013; Westgate, Riskind, & Nosek, 2015), and changes to legislation mean that same-sex couples can get married in many countries. In spite of this social progress, there is still evidence that prejudice and discrimination, even in subtle forms, are impacting the mental health and well-being of this at-risk population. Societal level prejudice (Diaz, Ayala, Bein, Henne, & Marin, 2001; McDermott, Roen, & Scourfield, 2008), workplace discrimination (Barrantes & Eaton, 2018; Willis, 2010), harassment and bullying (Fedewa & Ahn, 2011), and sexual objectification processes within the gay community (Anderson, Holland, Koc, & Haslam, 2018) are known to negatively impact gay men's behaviors, task performance, mental health, and well-being. For example, Lee, Oliffe, Kelly, and Ferlatte (2017) recently reported that gay men are still disproportionately susceptible to depression and suicide, with the main contributing risk factors including family support and acceptance, social cohesion and belonging, victimization, and internalized stigma. In severe cases, victimization based on sexual orientation has resulted in self-harm and suicidal behaviors (Duong & Bradshaw, 2014). In this paper, we explore if the endorsement of stereotypical beliefs is linked to the well-being of gay men. Specifically, we will explore if gay men's well-being is negatively predicted by both personal endorsement of these stereotypes (i.e., self-stereotype endorsement) and the belief that others endorse these stereotypes (i.e., meta-stereotype endorsement).

### **Stereotype Endorsement and Related Outcomes**

A body of evidence suggests that the existence of stereotypes (i.e., "associations and beliefs about the characteristics and attributes of a group and its members that shape how people think about and respond to the group"; Dovidio, Hewstone, Glick, & Esses, 2010, p. 7) typically result in negative impacts for individuals or groups that are the target of the stereotype. For example, research has shown that heterosexuals' endorsement of stereotypical beliefs about gay men and lesbian women is linked to opposition for gay rights policies (Reyna, Wetherell, Yantis, & Brandt, 2014) and anti-gay attitudes (Piumatti, 2017). Indeed, the strength and content of stereotypes are so pervasive that individuals will self-stereotype

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(i.e., hold stereotypical beliefs about their own social groups; Simon & Hamilton, 1994). Explanations for this counter-intuitive process include arguments that cultural exposure results in the internalization of these self-'relevant' (i.e., relevant in that they are about the self, although not necessarily accurate) beliefs, or that they might be a protective cognitive mechanism that emerges when activated in certain social situations (Burkley & Blanton, 2009; Cox, Abramson, Devine, & Hollon, 2012).

Although many stereotypes exist about gay men, and some research has explored these stereotypes (e.g., Clausell & Fiske, 2005; Fingerhut & Peplau, 2006), little research exists about gay men's self-stereotyping. The literature has documented that gay men are aware of – and endorse to differential degrees – common gay stereotypes, typically about their lack of masculinity (Sánchez, Greenberg, Liu, & Vilain, 2009; see also Simon, Glässner-Bayerl, & Stratenwerth, 1991). Historically, gay men and lesbian women have been pathologized and sexual orientation has been assumed to drive mental illness, as well as being a diagnosable clinical condition in its own right (for a review, see Anderson & Holland, 2015). Given the prevalence of mental health concerns in this community, the existence of research revealing that gay men are aware of, and endorse, negative stereotypes about their own mental health (e.g., sexual and gender identity disorders, substance abuse disorders, etc.) is unsurprising (Boysen, Fisher, DeJesus, Vogel, & Madon, 2011; Boysen, Vogel, Madon, & Wester, 2006). Although there is some research of gay men's endorsement of self-stereotypes, there is a lack of research exploring the impact of such self-stereotyping. Given the prevalence of stereotypes about this group, and knowledge that this group tend to internalize prejudice toward themselves (Feinstein, Goldfried, & Davila, 2012; Frost & Meyer, 2009), it is likely that they also internalize widely-held stereotypical beliefs about their own group. Thus, exploring the strength of gay men's self-stereotype endorsement is the first major aim of this study.

An interesting addendum to the stereotyping and self-stereotyping literature is the evidence which demonstrates that the negative impact of stereotypes does not even require personal endorsement. Indeed, the awareness of *meta*-stereotype content (i.e., stereotypes that in-group members anticipate out-group members to hold about their in-group; Vorauer, Main, & O'Connell, 1998) is also common, and research has demonstrated the negative impact between meta-stereotype endorsement and the well-being of members of the stereotyped group. For example, in a recent study with a sample of black women, the awareness of stereotypes (from an out-group) surrounding black women (in-group) was related to poor

mental health outcomes (depression, anxiety, and hostility) and indirectly related to poor self-care (Jerald, Cole, Ward, & Avery, 2017). Negative meta-stereotypes have also been linked to other components of well-being; White Canadians who endorsed meta-stereotypes of how Indigenous Canadians thought about their social group experienced decreases in momentary self-evaluations (lower self-esteem and poorer quality self-concept; Vorauer et al., 1998). These researchers also explored the distinction between self-stereotyping and meta-stereotype endorsement and found that, on average, negative meta-stereotypes were endorsed to a stronger degree than negative self-stereotypes. To our knowledge, there is no research exploring gay men's meta-stereotyping, nor its relationship with well-being. Thus, exploring the relationship between gay men's meta-stereotype endorsement and well-being is the second major aim of this study.

### **The Current Study**

Although there is an extensive amount of research exploring the stereotypes pertaining to gay men, the focus has been primarily around the content of attitudes and beliefs of heterosexuals' stereotypes of gay men (e.g., Clausell & Fiske, 2005), or of stereotype threat effects on task performance (e.g., Bosson, Haymovitz, & Pinel, 2004). Little attention has been paid to the impact of stereotype endorsement, and (to our knowledge) no research has yet explored such impacts of endorsement for gay men.

In this paper, we explore gay men's self-stereotype and meta-stereotype endorsement, and the extent of the impact that endorsing these beliefs may have on gay men's mental (affective/emotional) and cognitive (self-evaluative) well-being outcomes. We decided to focus on two common stereotypes within the gay community; effeminate/gender expression and promiscuity stereotypes. A recent U.S study by Calabrese et al. (2018) has further validated this prevalence finding - when participants used a free-response option to stereotypically characterize black and white gay men, 'Effeminate' and 'Promiscuous' were the two most commonly reported. The majority of past research has investigated stereotypes of gay men focusing only on one specific stereotype, including the effeminate stereotype (Piumatti, 2017; Sanchez, Blas-Lopez, Martínez-Patiño, & Vilain, 2016) and the promiscuity stereotype (Pinsof & Haselton, 2017), however we aimed to broaden this scope by including items relevant to both gender expression and promiscuity stereotypes in our endorsement inventory. The closest research we found that was similar to this was from an unpublished thesis by Moore (2012), which included both of these stereotypes (and others unrelated to the present research) in one stereotype inventory. Importantly, this study also focused on

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endorsement (rather than prevalence) and had a gay male sample, thus we found the stereotype items used in this study to be an appropriate fit to our current study.

In this paper, we test the following hypotheses:

- H1: *Stereotype endorsement prevalence hypothesis*- Consistent with existing research in other social groups (e.g., Vorauer et al., 1998), we expect gay men to endorse both self- and meta-stereotypes (H1a), but to more strongly endorse the latter (H1b).
- H2: *Stereotype endorsement impact hypothesis* - Consistent with existing research in other social groups (Jerald et al., 2017), we hypothesized that increases in gay men's self- and meta-stereotyping will be related to decreases in well-being. Specifically, endorsement of these stereotypes will predict decreases in mental well-being (depression, anxiety, and stress indicators; H2a) and cognitive well-being (life satisfaction, self-worth; H2b).

### Method

#### Participants

Two hundred and sixty-seven participants responded to our online survey targeting same-sex attracted men. Fourteen participants terminated their participation after reading the participant information letter, leaving a final sample of 253 male-identifying sexual minority respondents (age range: 18 - 78 years;  $M = 38.25$ ,  $SD = 13.51$ ). The majority of participants ( $n = 219$ ) self-identified as gay men with the exception of 11 (4.4%) who identified as either female-to-male transgender or 'other', and 23 (9.1%) who classified their sexuality as being either bisexual, queer, questioning, or 'other'. The data from all participants were included in the analyses reported below<sup>1</sup>.

Participants responded to a single item indicating their political orientation toward social issues on a scale ranging from 1 (*very conservative*) to 7 (*very progressive*). The sample reported a progressive political orientation - scores were above the scale midpoint,  $t(252) = 25.23$ ,  $p < .001$ ,  $M_{diff} = 1.68$ , 95% CI [1.55, 1.81]. Approximately half (46.6%) the sample were in a relationship (78 monogamous, 37 open, 3 polyamorous), and the remaining 135 (53.4%) were single.

#### Materials

##### Predictor Variables

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<sup>1</sup> Note: we ran all analyses with this entire sample and with only gay men – the differences were not meaningfully significant and so in the interest of conserving statistical power, we used the full sample.

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Adapted from Moore (2012), six different stereotype-informed statements were selected for our inventory, with three items ('*Gay men are more feminine than straight men*', '*Gay men typically have mannerisms similar to women*', and '*Straight men are much more masculine than gay men*') pertaining to gender expression and three items ('*Gay men are more promiscuous than straight men*', '*Gay men have a higher rate of contracting HIV and other sexually transmitted diseases than the general public*', and '*Straight men have the same amount of sexual partners as gay men*') pertaining to sexual promiscuity. These items were endorsed on a scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). To measure differences between self- and meta-stereotype endorsement, participants were asked these items twice with different instructions. Participants were asked to rate how much they '*personally*' agree or disagree with each statement (i.e., self-stereotype endorsement), and, using instructions similar to the study by Jerald et al. (2017), participants were also asked how much they believe that these stereotypes are '*commonly held within society*' (i.e., meta-stereotype endorsement).

Since this scale is used for the first time in an Australian sample, to validate the factor structure and assess the reliability, we conducted two confirmatory factor analyses (CFA) for each one of self- and meta-stereotype endorsement scales using JAMOVI Version 0.9 (Jamovi Project, 2018). We used a standard range of fit indices to assess global model fit: comparative fit index (CFI), Tucker-Lewis index (TLI), root mean square error of approximation (RMSEA), and standardized root mean square residual (SRMR). According to Kline (2005), values of CFI above .90 are acceptable. According to Forza and Filippini (1998), values of TLI above .90 are acceptable. According to Hu and Bentler (1999), values of SRMR below .06 and RMSEA below .08 are acceptable. We also computed composite reliability (CR) from the standardized factor loadings (Raykov, 1997), and expected the values to be larger than .70 (Hair, Black, Babin, & Anderson, 2014). For each scale, we estimated a single latent factor with six items used as indicators.

For self-stereotype endorsement, the model first showed a poor fit to the data,  $\chi^2(9) = 75.83, p < .001$ ; CFI = 0.81; TLI = .68; RMSEA = 0.17 (90% CI = 0.14, 0.21); SRMR = 0.09. The reason for the poor fit was due to one of the items (i.e., '*Straight men have the same amount of sexual partners as gay men*') having a low loading ( $\lambda = -.23, p = .001$ ). Once we removed this item, the model fit improved to a satisfactory level:  $\chi^2(5) = 9.70, p = .084$ ; CFI = 0.98; TLI = .97; RMSEA = 0.06 (90% CI = 0.01, 0.12); SRMR = 0.04; and all five items

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loaded accurately onto the single factors ( $\lambda_s \geq .30, p < .001$ ). The composite reliability was also good (CR = .74)

For meta-stereotype endorsement, we obtained similar results when all six items were included, so we decided to keep both models similar and ran the CFA on five items. The model showed overall acceptable fit to the data,  $\chi^2(5) = 27.88, p < .001$ ; CFI = 0.96; TLI = .93; RMSEA = 0.14 (90% CI = 0.09, 0.19); SRMR = 0.05; and all items loaded accurately onto the single factor ( $\beta_s \geq .51, p < .001$ ). The composite reliability for the latent factor was also good (CR = .87). Here, the RMSEA value may raise some concerns; however, Kenny and McCoach (2003) suggest that RMSEA is susceptible to model complexity, and it tends to remain high in cases of small number of indicators in CFA models. In this case, we have a total of five indicators in the entire model; therefore, it is expected that RMSEA could be high. However, the rest of the global fit indices, the good local fit, and the composite reliability combined provide enough evidence that the scale has a valid factor structure for this sample. This scale was scored using the sum of all five items, with higher scores indicating greater stereotype endorsement.

The Traditional Masculinity-Femininity Scale (TMFS; Kachel, Steffens, & Niedlich, 2016) assesses self-reported gender expression (i.e., masculine vs. feminine) across six items (e.g., 'Traditionally, my interests would be considered as...'). Participants were asked to indicate how they perceive their own gender expression on a range of behavioral, psychological, and affective gender-relevant items on a scale ranging from 1 (*very feminine*) to 7 (*very masculine*). Responses were scored using the sum of all items with higher scores indicating more masculine and lower scores indicating more feminine. This measure yielded adequate levels of scale-score reliability in this sample ( $\alpha = .86, 95\% \text{ CI } [0.83, 0.88]$ ).

### **Outcome Variables**

Mental well-being was conceptualized as the participants' affective state, with low levels of mental well-being represented as a negative emotional state. We measured this using the short form of the *Depression Anxiety and Stress Scale* (DASS-21; Lovibond & Lovibond, 1995). This measure assesses self-reported depression (e.g., 'I couldn't seem to experience any positive feeling at all'), anxiety (e.g., 'I felt scared without any good reason'), and stress (e.g., 'I found it difficult to relax'). Participants endorsed the 21 statements (seven items per sub-scale) applied to them based on their reflections from the previous week, using a rating scale ranging from 0 (*not at all*) to 3 (*very much*). Responses were scored using the sum of appropriate items with higher scores indicating lower levels of mental well-being. All

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sub-scales yielded acceptable levels of scale-score reliability in the current sample (depression:  $\alpha = .94$ , 95% CI [0.93, 0.96]; anxiety:  $\alpha = .88$ , 95% CI [0.85, 0.90]; stress:  $\alpha = .92$ , 95% CI [0.90, 0.93]).

Cognitive well-being was conceptualized as the participants' current subjective self-evaluations, with low levels of cognitive well-being represented by poor evaluations of life satisfaction and self-worth. We measured this with two scales. First, we used the *Satisfaction with Life Scale* (SWLS; Diener, Emmons, Larsen, & Griffin, 1985) in which participants are asked to indicate how satisfied they are with their life by endorsing five items (e.g., 'In most ways my life is close to my ideal') on a scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). Second, we used the *Momentary Feelings of Self-Worth Scale* (MFSWS; Brown & Brown, 2011), in which participants are asked to endorse four statements about their feelings at the time on a scale ranging from 1 (*not at all*) to 7 (*a great deal*). For both scales, responses were scored using the sum of all items (with appropriate items reverse scored) with higher scores indicating higher levels of cognitive well-being, and each scale yielded acceptable levels of scale-score reliability in the current sample (SWLS:  $\alpha = .92$ , 95% CI [0.90, 0.93]; MFSWS:  $\alpha = .86$ , 95% CI [0.82, 0.89]).

### **Procedure**

Participants were recruited from social media (e.g., Facebook) and classified websites (e.g., Reddit, Gumtree). To help diversify our sample, we shared the link to our study with several active LGBTI+, Queer, and Gay Male Australian social media groups and pages, both regional and inner city. Participants were told that this brief online survey will be assessing different attitudes of gay males toward different social groups and the stereotypes that surround them. Participants were first instructed to provide consent upon commencing the online survey (hosted by: <http://www.qualtrics.com/>). Participants then completed the demographic questions, followed by the randomized questionnaire measures before being debriefed and thanked for their time.

## **Results**

### **Data Screening**

Prior to running any analyses, data were screened for normality and outliers. Some variables were slightly skewed (e.g., all subscales of the DASS-21 and the MFSWS); we corrected these issues of non-normality by applying logarithmic transformations. Three data points were identified as outliers (one negative outlier in the MFSWS,  $Z = -3.39$ ; two positive

outliers in the anxiety subscale of the DASS-21, both  $Z$ 's = 3.64). These were replaced with the mean  $\pm$  3 standard deviations for that scale (Field, 2017). As the data were collected using an online survey, there were some data points missing due to incomplete responses (21% of respondents failed to complete at least one measure). We checked for any systematic nature of the data that were missing by conducting a Little's MCAR test, which revealed that data were missing completely at random,  $\chi^2(353) = 316.45, p = .920$ , thus we decided to run analyses with all data (missing data are reflected in the varying degrees of freedom across analyses).

### Correlations Between Variables

Correlation analyses reveal that mental well-being was more strongly correlated with self-stereotype endorsement than meta-stereotype endorsement. Conversely, cognitive well-being was more strongly correlated with meta-stereotype endorsement than self-stereotype endorsement. We used Steiger's  $Z$  transformations to allow a statistical comparison of these correlations based on calculations provided by Lenhard and Lenhard (2014); we found partial evidence for differences in relationship strength between both stereotype endorsement measures and mental well-being. Specifically, the correlations were significantly stronger for self-stereotyping (compared to meta-stereotype endorsement) with anxiety ( $z = 2.19, p = .014$ ) and stress ( $z = 2.40, p = .008$ ), both positive relationships, but not depression ( $z = 1.22, p = .112$ ). There was no evidence for differences in relationship strength between both stereotype endorsement measures and cognitive well-being (SWLS:  $z = 0.86, p = .210$ ; MFSWS:  $z = 1.04, p = .149$ ). Descriptive statistics and correlations between all variables are presented in Table 1.

[INSERT TABLE 1 HERE]

### Hypothesis Testing

**Testing the stereotype endorsement prevalence hypothesis.** First, we conducted single sample  $t$ -tests on each form of stereotype endorsement. Results indicate that only meta-stereotype endorsement was endorsed more strongly than the scale mid-point (i.e., the 'neutral' mid-point),  $t(234) = 5.78, p < .001, M_{diff} = 2.60, 95\% \text{ CI } [1.71, 3.49]$ . Self-stereotype endorsement was endorsed just above the scale mid-point, however this difference was not significant. Second, we ran a paired samples  $t$ -test to examine differences in the strength of gay men's stereotype endorsements (self- vs meta-stereotype endorsement). Gay men's meta-stereotype endorsement ( $M = 22.60, SD = 6.90$ ) was significantly higher than

their self-stereotype endorsement ( $M = 20.16$ ,  $SD = 5.47$ ),  $t(234) = -7.23$ ,  $p < .001$ ,  $M_{diff} = -2.44$ , 95% CI [-3.10, -1.77], Cohen's  $d = .39$ .

**Testing the stereotype endorsement impact hypothesis.** We conducted a series of two-step hierarchical multiple regression analyses (MRAs; based on an OLS method) using self- and meta-stereotype endorsements as predictors of mental and cognitive well-being. As the stereotype items measured in this study had a focus on effeminate and promiscuous stereotypes, we found it appropriate to control for participant demographics, namely age, relationship status, and self-reported gender expression. Thus, for each MRA, Step 1 contained three control covariates (age, relationship status, [masculine] gender expression), and Step 2 introduced the self- and meta-stereotype endorsement scores. In this way, we tested if stereotype endorsement predicted variance in well-being beyond that accounted for by these covariate demographic factors.

**Predicting mental well-being.** Three MRAs examined stereotype endorsements as predictors of three forms of mental well-being (as measured by the DASS-21), see Table 2 for regression coefficients. All analyses assumptions were met.

[INSERT TABLE 2 HERE]

*Depression.* In Step 1, age and relationship status were negative predictors of depression scores,  $F(3,204) = 7.27$ ,  $p < .001$ ,  $R^2 = .10$  ( $R_{adjusted}^2 = .08$ ), with increases in age and those in a relationship predicting decreases in depressive symptomology. In Step 2, the addition of stereotype endorsement measures contributed an additional 5.2% increase to the variance predicted by the model,  $\Delta F(2, 202) = 6.16$ ,  $p = .003$ . The final model revealed that relationship status and self-stereotype endorsement were significant predictors (i.e., increases in self-stereotyping predicted increases in depressive symptomology). The final model accounted for 14.9% of the variance,  $F(5,202) = 7.05$ ,  $p < .001$ , Cohen's  $f^2 = .175$ , which is considered a medium effect size (Cohen, 1988).

*Anxiety.* In Step 1, age and relationship status were again negative predictors of scores related to anxiety states,  $F(3,206) = 11.37$ ,  $p < .001$ ,  $R^2 = .14$  ( $R_{adjusted}^2 = .13$ ). In Step 2, the addition of stereotype endorsement measures contributed an additional 3.2% to the variance predicted by the model,  $\Delta F(2, 204) = 4.01$ ,  $p = .020$ . The final model revealed that age and self-stereotype endorsement were significant predictors (i.e., increases in self-stereotyping predicted increases in anxiety symptomology). The final model accounted for 17.4% of the

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variance,  $F(5,204) = 8.62, p < .001$ , Cohen's  $f^2 = .211$ , which is considered a medium to large effect size.

*Stress.* In Step 1, age and relationship status were again negative predictors of stress states,  $F(3,206) = 9.63, p < .001, R^2 = .12 (R_{\text{adjusted}}^2 = .11)$ . In Step 2, the addition of stereotype endorsement measures contributed an additional 3.9% to the variance predicted by the model,  $\Delta F(2, 204) = 4.69, p = .010$ . The final model revealed that age and self-stereotype endorsement were significant predictors of stress symptomology (i.e., increases in self-stereotyping predicted increases in stress). The final model accounted for 16.2% of the variance,  $F(5,204) = 7.86, p < .001$ , Cohen's  $f^2 = .193$ , indicating a medium effect size.

In all, self-stereotype endorsement predicted all measures of mental well-being, while meta-stereotype endorsement did not.

***Predicting cognitive well-being.*** Two MRAs were conducted to examine stereotype endorsements as predictors of cognitive well-being, see Table 3 for regression coefficients. All analyses assumptions were met.

[INSERT TABLE 3 HERE]

*Satisfaction with Life.* In Step 1, relationship status and gender expression were positive predictors,  $F(3,208) = 12.30, p < .001, R^2 = .15 (R_{\text{adjusted}}^2 = .14)$ , with greater masculinity and being in a relationship predicting increases in satisfaction with life. In Step 2, the addition of stereotype endorsement measures contributed an additional 4.9% to the variance predicted by the model,  $\Delta F(2, 206) = 6.26, p = .002$ . The final model revealed that relationship status, gender expression, and meta-stereotype endorsement were significant predictors of life satisfaction (i.e., increases in meta-stereotyping predicted decreases in life satisfaction). The final model accounted for 19.9% of the variance,  $F(5,206) = 10.25, p < .001$ , Cohen's  $f^2 = .248$ , which is considered a medium to large effect size.

*Momentary Self-Worth.* In Step 1, age and gender expression were positive predictors,  $F(3, 211) = 9.47, p < .001, R^2 = .12 (R_{\text{adjusted}}^2 = .11)$ , with increases in age and greater masculinity predicting increases in self-worth. In Step 2, the addition of stereotype endorsement measures contributed an additional 8.3% to the variance predicted by the model,  $\Delta F(2, 209) = 10.92, p < .001$ . The final model revealed that age, gender expression, and meta-stereotype endorsement were significant predictors of momentary self-worth (i.e., increases in meta-stereotyping predicted decreases in self-worth). The final model accounted

for 20.2% of the variance,  $F(5, 209) = 10.58$ ,  $p < .001$ , Cohen's  $f^2 = .253$ , indicating a medium to large effect size.

In all, and in a pattern which is reversed from the pattern that emerged for mental well-being predictors, meta-stereotype endorsement predicted both measures of cognitive well-being, while self-stereotype endorsement did not.

### Discussion

This paper explored the strength and impact of gay men's stereotype endorsement. Specifically, we explored differences in strength between the endorsement of gay men's self- and meta-stereotypes, and then the relationship between the strength of these endorsements with their mental and cognitive well-being. We found evidence to support most of our hypotheses. Specifically, partially supporting H1a, only meta-stereotyping was endorsed ( $M = 22.60$ ,  $SD = 6.90$ ) by our gay male participants as evidenced by their statistically high scores (i.e., above the scale's mid-point, labelled as 'neutral'). Although self-stereotyping was still endorsed by our participants ( $M = 20.12$ ,  $SD = 5.48$ ) just above the scale mid-point (i.e., 20), this difference was not significant. In addition, supporting H1b, the endorsement of meta-stereotypes was significantly stronger than the endorsement of self-stereotypes. These results indicate that, on average, gay male participants neither personally disagree nor agree with stereotype statements made about their group, however they do endorse that these stereotypes about their in-group are commonly held within society. This aligns with the research of Vorauer and colleagues (1998) who also found that their White Canadian participants endorsed meta-stereotypes more than self-stereotypes. It is worth noting that these researchers labeled the stereotypes about the group as negative stereotypes, whereas we did not indicate a valence to our stereotypes (a possible direction for future research). Further, the meta-stereotype instructions by Vorauer et al. (1998) specified a relevant 'out-group' (i.e., Indigenous Canadians), whereas our study, which adopted its instructions from the study by Jerald et al. (2017), instructed participants to rate their agreement or disagreement that these stereotypes are commonly endorsed within 'society', rather than a targeted out-group (e.g., straight males).

We found support for our stereotype endorsement impact hypotheses (H2), although not full support. Indeed, we found some unique caveats in the endorsement-consequences relationship. Although self- and meta-stereotype endorsement scores were strongly related to one another, an interesting pattern of results emerged in terms of their differential predictive

value. Specifically, we found that self-stereotyping predicted mental well-being, but that meta-stereotyping did not. This suggests that gay men's personal endorsement of beliefs about their own social group is related to negative emotional states. These findings support the integrated perspective framework proposed by Cox et al. (2012), who suggests that prejudice should be considered both in terms of the source (self vs. other) and the target (self vs. other). They theorized that situations in which individuals are both the source *and* the target of prejudice would lead to depression. We found that self-stereotyping (the cognitive component of prejudice, in which the self is both the source and the target) predicted increases in depressive symptomology, as well as other negative affective states.

In contrast to these findings, we also found that meta-stereotyping predicted cognitive well-being, but self-stereotyping did not. This suggests that the extent to which gay men believe that societal-level stereotyping of their social group occurs is related to how they evaluate the quality of their lives, both in terms of momentary and more lasting evaluations. This finding is consistent with the literature by Vorauer et al. (1998) who found that meta-stereotype endorsement is linked to lower momentary self-evaluations – albeit we measured momentary self-worth whereas Vorauer and colleagues (1998) measured momentary self-esteem and self-concept. Thus, our research replicates the conceptual finding that meta-stereotype endorsement is linked to poorer momentary evaluations, but also extends these findings to include less fleeting evaluations such as life satisfaction.

Our findings did not align perfectly with the existing literature. In contrast to our findings, previous research by Jerald et al. (2017) found that meta-stereotype awareness *was* related to poorer mental well-being (depression, anxiety, and hostility) in a sample of Black women - a pattern that we did not replicate in our sample of gay men. Although there are a multitude of sample-based differences (e.g., along the dimensions of gender, ethnicity, sexual orientation, and nationality), there are a few alternative explanations that are also worth considering. First, we measured *endorsement* of stereotypes rather than just awareness, which indicates a level of internalizing the belief system. Given the negative nature of these stereotypes, it is unsurprising that internalizing them might negatively impact mental well-being. Second, we explored stereotype endorsement of the social category of gay – a sometimes concealable category. Certainly the evidence suggests that typical social categorization cues are not overly reliable for this group (Freeman, Johnson, Ambady, & Rule, 2010). Conversely, the previous sample were members of the dual visually-salient minority categories (i.e., ethnic and gender minorities). In this case, our sample might be less

concerned with outgroup members stereotypical beliefs about their in-group, given that they might be able to conceal or deny their membership to it (and indeed, we failed to measure levels of 'out-ness' – a factor known to be confronting for this sample; Kaufmann, Williams, Hosking, Anderson, & Pedder, 2015). We note that these explanations are somewhat unsatisfying in that they explain why self-stereotypes predict mental well-being but not why meta-stereotypes do not. However, we also note that both forms of stereotype endorsement were correlated with both forms of well-being at the bivariate level, but that they did not both contribute significant amounts of *unique* variance in well-being in our sample.

We pose one final consideration, based on the Australian social context in which this research was conducted. During 2017, and specifically during the data collection timeframe, the Australian public was preparing to vote in a non-binding survey about modifying marriage legislation to include marriage between any two people (including marriage for gay couples; see Anderson, Georgantis, & Kapelles, 2017). During this time, negative stereotypes about gay couples and individuals were salient in political and media rhetoric. As such, one parsimonious explanation for the finding linking meta-stereotype endorsement with poorer cognitive well-being would be that gay individuals were internalizing the negative stereotypes about their inability to hold relationships and have equal rights to their heterosexual counterparts (beyond their level of conscious endorsement), which would directly impact their self-evaluations of life and self-worth. While these claims are somewhat speculative, and not addressed by our data, they do constitute a plausible explanation for our meta-stereotype endorsement findings.

### **Limitations and Future Directions**

This research is the first, to our knowledge, to explore the relationship of self- and meta-stereotype endorsements with well-being. Being the first of its kind brings a range of benefits, but also a few limitations. For example, this study used relatively homogenous stereotype items pertaining to gender expression and promiscuity. However, as a social category, gay men have a host of different stereotypes that can be applied to them, including some that might change from negative to positive based on the context. Recent research by Calabrese et al. (2018) has explored this by looking at the intersectionality of sexual stereotypes of black gay men, and its distinction from stereotypes related to black men or gay men. This study found several different types of stereotypes pertaining to gay men, white gay men, and black gay men (e.g., 'effeminate', 'promiscuous', 'unnatural', 'diseased', etc.), which should also be considered when assessing the impact of stereotypes on health in this

minority group. This makes gay male stereotypes a fruitful ground for experimental explorations of the effects of self-stereotype endorsement as a function of stereotype valence and utility. For instance, future research can make a distinction between positive and negative stereotypes about gay men, and also look into how it relates to one's intersecting gay and male identity integration. Perhaps, as recent research suggests, the more gay men identify as global citizens, it is more likely for them to endorse the positive stereotypes which might help them improve their gay-male identity integration and hence well-being, as opposed to the detrimental effects of the negative stereotypes (Koc & Vignoles, 2018). Moreover, given the rapidly evolving social norms and stereotypes around gay men and gender more broadly (and the consequences of evolving social norms for this group, see Falomir-Pichastor, Berent, & Anderson, 2019), experimental manipulations of meta-stereotypes around this group are also plausible. Given that previous research has studied stereotypes focusing on one specific type of stereotype (e.g., the effeminate stereotype of gay men), and also given that the way these stereotypes are measured are often inconsistent between studies, future researchers should consider developing a comprehensive scale of gay male stereotypes which includes a host of different types (rather than just effeminacy or promiscuity-related stereotypes), which can often be overlooked.

Other factors need to be considered when drawing conclusions on how different types of stereotype endorsement can impact mental health and well-being. When exploring the impact of meta-stereotype awareness on health outcomes in Black women, Jerald et al. (2017) also explored how the centrality of racial identity moderated this effect. They found no significant effects that racial centrality moderated the effect of meta-stereotype awareness on mental health outcomes (depression, anxiety, hostility). However, they did find an effect on self-care – specifically, Black woman whose racial identity was highly central to their self-concept moderated the negative effect between meta-stereotype awareness and self-care. Although this finding is not directly related to the well-being measures used in the current study, this provides important direction for future researchers to consider examining the effects of self-concept and identity, and other potential moderators, and their relationship(s) with the different consequences of stereotype endorsement.

### **Conclusion**

The findings of this study provide evidence that stereotypes surrounding the gay community are endorsed by its own members, and that there are detrimental consequences in terms of negatively impacted well-being. Both self- and meta-stereotypes were endorsed by

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gay men (however only the latter was significantly and strongly endorsed), with significantly stronger endorsement of meta-stereotypes. Self-stereotyping was shown to negatively impact mental well-being (affective states: depression, anxiety, and stress symptomology), whereas meta-stereotype endorsement was shown to negatively impact cognitive well-being (self-evaluations: life satisfaction, and self-worth). The findings of this study provide evidence for the consequences of endorsing stereotypes about your in-group, and the impacts on endorsing societal views on stereotypes. Given that the stereotypes about gay men are prevalent and varied in most communities (in terms of content and valence), we encourage further research in this domain to explore how different types of stereotypes surrounding gay men (specifically those unrelated to gender expression) can impact aspects of well-being, and how other factors such as self-concept and identity can influence these outcomes.

## References

- Anderson, J. R., Georgantis, C., & Kapelles, T. (2017). Predicting support for marriage equality in Australia. *Australian Journal of Psychology*. doi:10.1111/ajpy.12164
- Anderson, J. R., & Holland, E. (2015). The legacy of medicalising 'homosexuality': A discussion on the historical effects of non-heterosexual diagnostic classifications. *Sensoria: A Journal of Mind, Brain, and Culture*, 12, 4-15. doi:10.7790/sa.v11i1.405
- Anderson, J. R., Holland, E., Koc, Y., & Haslam, N. (2018). iObjectify: Self- and other-objectification on Grindr, a geosocial networking application designed for men who have sex with men. *European Journal of Social Psychology*. doi:10.1002/ejsp.2350
- Barrantes, R. J., & Eaton, A. A. (2018). Sexual orientation and leadership suitability: How being a gay man affects perceptions of fit in gender-stereotyped positions. *Sex Roles*. doi:10.1007/s11199-018-0894-8
- Bosson, J. K., Haymovitz, E. L., & Pinel, E. C. (2004). When saying and doing diverge: The effects of stereotype threat on self-reported versus non-verbal anxiety. *Journal of Experimental Social Psychology*, 40(2), 247-255. doi:10.1016/S0022-1031(03)00099-4
- Boysen, G. A., Fisher, M., DeJesus, M., Vogel, D. L., & Madon, S. (2011). The mental health stereotype about gay men: The relation between gay men's self-stereotype and stereotypes about heterosexual women and lesbians. *Journal of Social and Clinical Psychology*, 30(4), 329-360. doi:10.1521/jscp.2011.30.4.329
- Boysen, G. A., Vogel, D. L., Madon, S., & Wester, S. R. (2006). Mental health stereotypes about gay men. *Sex Roles*, 54(1-2), 69-82. doi:10.1007/s11199-006-8870-0
- Brown, J. D., & Brown, M. A. (2011). Self-reflection and feelings of self-worth: When Rosenberg meets Heisenberg. *Journal of Experimental Social Psychology*, 47(6), 1269-1275. doi:10.1016/j.jesp.2011.05.019
- Burkley, M., & Blanton, H. (2009). The positive (and negative) consequences of endorsing negative self-stereotypes. *Self and Identity*, 8(2-3), 286-299. doi:10.1080/15298860802505202
- Calabrese, S. K., Earnshaw, V. A., Magnus, M., Hansen, N. B., Krakower, D. S., Underhill, K., . . . Dovidio, J. F. (2018). Sexual stereotypes ascribed to black men who have sex with men: An intersectional analysis. *Archives of Sexual Behaviour*, 47(1), 143-156. doi:10.1007/s10508-016-0911-3
- Clausell, E., & Fiske, S. T. (2005). When do subgroup parts add up to the stereotypic whole? Mixed stereotype content for gay male subgroups explains overall ratings. *Social Cognition*, 23, 161-181. doi:10.1521/soco.23.2.161.65626
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences*. Hillside: Erlbaum.
- Cox, W. T., Abramson, L. Y., Devine, P. G., & Hollon, S. D. (2012). Stereotypes, Prejudice, and Depression: The Integrated Perspective. *Perspectives on Psychological Science*, 7(5), 427-449. doi:10.1177/1745691612455204
- Diaz, R. M., Ayala, G., Bein, E., Henne, J., & Marin, B. V. (2001). The impact of homophobia, poverty, and racism on the mental health of gay and bisexual Latino men: Findings from 3 US cities. *The American Journal of Public Health*, 91(6), 927 - 932.
- Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The Satisfaction With Life Scale. *Journal Of Personality Assessment*, 49(1), 71 - 75.
- Dovidio, J. F., Hewstone, M., Glick, P., & Esses, V. M. (2010). Prejudice, Stereotyping and Discrimination: Theoretical and Empirical Overview. In J. F. Dovidio, M. Hewstone, P. Glick, & V. M. Esses (Eds.), *The SAGE Handbook of Prejudice, Stereotyping and Discrimination* (pp. 3 - 28). London: Sage Publications Ltd.

## GAY MEN'S STEREOTYPE ENDORSEMENT AND WELL-BEING

- Duong, J., & Bradshaw, C. (2014). Associations between bullying and engaging in aggressive and suicidal behaviors among sexual minority youth: The moderating role of connectedness. *Journal of School Health, 84*(10), 636-645. doi:10.1111/josh.12196
- Falomir-Pichastor, J. M., Berent, J., & Anderson, J. R. (2019). Perceived Men's Feminization and Attitudes Toward Homosexuality: Heterosexual Men's Reactions to the Decline of the Anti-Femininity Norm of Masculinity. *Sex Roles, 1-15*. doi:10.1007/s11199-018-0985-6
- Fedewa, A. L., & Ahn, S. (2011). The effects of bullying and peer victimisation on sexual-minority and heterosexual youths: A quantitative meta-analysis of the literature. *Journal of GLBT Family Studies, 7*(4), 398-418. doi:10.1080/1550428X.2011.592968
- Feinstein, B. A., Goldfried, M. R., & Davila, J. (2012). The relationship between experiences of discrimination and mental health among lesbians and gay men: An examination of internalized homonegativity and rejection sensitivity as potential mechanisms. *Journal of Consulting and Clinical Psychology, 80*(5), 917. doi:10.1037/a0029425
- Field, A. P. (2017). *Discovering statistics using IBM SPSS Statistics* (5th ed.). London: Sage.
- Fingerhut, A. W., & Peplau, L. A. (2006). The impact of social roles on stereotypes of gay men. *Sex Roles, 55*(3-4), 273-278. doi:10.1007/s11199-006-9080-5
- Freeman, J. B., Johnson, K. L., Ambady, N., & Rule, N. O. (2010). Sexual orientation perception involves gendered facial cues. *Personality and Social Psychology Bulletin, 36*, 1318-1331. doi:10.1177/0146167210378755
- Frost, D. M., & Meyer, I. H. (2009). Internalized homophobia and relationship quality among lesbians, gay men, and bisexuals. *Journal of Counseling Psychology, 56*, 97-109. doi:10.1037/a0012844
- Herek, G. M., & McLemore, K. A. (2013). Sexual Prejudice. *Annual Review of Psychology, 64*, 309-333. doi:10.1146/annurev-psych-113011-143826
- Jerald, M. C., Cole, E. R., Ward, L. M., & Avery, L. R. (2017). Controlling images: How awareness of group stereotypes affects Black women's well-being. *Journal of Counseling Psychology, 64*(5), 487-499. doi:10.1037/cou0000233
- Kachel, S., Steffens, M. C., & Niedlich, C. (2016). Traditional masculinity and femininity: Validation of a new scale assessing gender roles. *Frontiers in Psychology, 7*. doi:10.3389/fpsyg.2016.00956
- Kaufmann, L. M., Williams, B., Hosking, W., Anderson, J., & Pedder, D. J. (2015). Identifying as in, out, or sexually inexperienced: Perception of sex-related personal disclosures. *Sensoria: A Journal of Mind, Brain & Culture, 11*(1), 28-40.
- Lee, C., Oliffe, J. L., Kelly, M. T., & Ferlatte, O. (2017). Depression and suicidality in gay men: Implications for health care providers. *American Journal of Men's Health, 11*(4), 910-919. doi:10.1177/1557988316685492
- Lenhard, W., & Lenhard, A. (2014). Hypothesis Tests for Comparing Correlations. Retrieved from <https://www.psychometrica.de/correlation.html>
- Lovibond, S. H., & Lovibond, P. F. (1995). *Manual for the Depression Anxiety Stress Scales*. (2nd. Ed.): Sydney: Psychology Foundation.
- McDermott, E., Roen, K., & Scourfield, J. (2008). Avoiding shame: young LGBT people, homophobia and self-destructive behaviours. *Culture, Health, and Sexuality, 10*(8), 815-829. doi:10.1080/13691050802380974
- Moore, M. (2012). *Believing that Gay Men are More Feminine than Straight Men; How Stereotype Threat and Identity Stability Affect Sexual Minority Men*. (Bachelor of Arts with Honors in Psychology Honors Thesis), University of Michigan,
- Pinsof, D., & Haselton, M. G. (2017). The effect of the promiscuity stereotype on opposition to gay rights. *PLoS One, 12*(7), e0178534. doi:10.1371/journal.pone.0178534

## GAY MEN'S STEREOTYPE ENDORSEMENT AND WELL-BEING

- Piumatti, G. (2017). A Mediational Model Explaining the Connection Between Religiosity and Anti-Homosexual Attitudes in Italy: The Effects of Male Role Endorsement and Homosexual Stereotyping. *Journal of Homosexuality*, 64(14), 1961-1977. doi:10.1080/00918369.2017.1289005
- Reyna, C., Wetherell, G., Yantis, C., & Brandt, M. J. (2014). Attributions for sexual orientation vs. stereotypes: how beliefs about value violations account for attribution effects on anti - gay discrimination. *Journal of Applied Social Psychology*, 44(4), 289-302. doi:10.1111/jasp.12226
- Sanchez, F. J., Blas-Lopez, F. J., Martínez-Patiño, M. J., & Vilain, E. (2016). Masculine consciousness and anti-effeminacy among latino and white gay men. *Psychology of Men & Masculinity*, 17(1), 54-63. doi:10.1037/a0039465
- Sánchez, F. J., Greenberg, S. T., Liu, W. M., & Vilain, E. (2009). Reported effects of masculine ideals on gay men. *Psychology of Men & Masculinity*, 10(1), 73.
- Simon, B., Glässner-Bayerl, B., & Stratenwerth, I. (1991). Stereotyping and self-stereotyping in a natural intergroup context: The case of heterosexual and homosexual men. *Social Psychology Quarterly*, 252-266.
- Vorauer, J. D., Main, K. J., & O'Connell, G. B. (1998). How do individuals expect to be viewed by members of lower status groups? Content and implications of meta-stereotypes. *Journal of Personality and Social Psychology*, 75(4), 917 - 937. doi: 10.1037/0022-3514.75.4.917
- Westgate, E. C., Riskind, R. G., & Nosek, B. A. (2015). Implicit preferences for straight people over lesbian women and gay men weakened from 2006 to 2013. *Collabra Open Access Journal*, 1(1). doi:doi.org/10.1525/collabra.18
- Willis, P. (2010). Laboring in Silence: Young lesbian, gay, bisexual, and queer-identifying workers' negotiations of the workplace closet in australian organizations. *Youth & Society*, 43(3), 957-981. doi:10.1177/0044118x10377650

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Table 1

*Correlations and Descriptive Statistics for Demographic Items, Stereotype Endorsement, and Mental and Cognitive Well-Being*

	1	2	3	4	5	6	7	8	9	10	<i>M (SD)</i>	<i>N</i>
1. Age	-										38.25 (13.51)	253
2. Relationship Status <sup>a</sup>	<b>.15*</b>	-									-	253
3. Political Ideology	.02	.11	-								5.68 (1.06)	253
4. TMFS	<b>.25***</b>	.09	-.11	-							27.87 (5.47)	253
5. Self-Stereotype Endorsement	<b>-.24***</b>	-.12	<b>-.13*</b>	-.10	-						20.12 (5.48)	247
6. Meta-Stereotype Endorsement	<b>-.25***</b>	.02	-.06	-.10	<b>.67***</b>	-					22.60 (6.90)	235
<i>Mental well-being</i>												
7. Depression	<b>-.19**</b>	<b>-.24**</b>	-.06	<b>-.16*</b>	<b>.29***</b>	<b>.23**</b>	-				5.34 (5.75)	208
8. Anxiety	<b>-.33***</b>	<b>-.20**</b>	<b>-.14*</b>	<b>-.17*</b>	<b>.25***</b>	<b>.14*</b>	<b>.71***</b>	-			3.97 (4.58)	210
9. Stress	<b>-.32***</b>	<b>-.18*</b>	-.01	<b>-.15*</b>	<b>.26***</b>	<b>.14*</b>	<b>.76***</b>	<b>.75***</b>	-		6.45 (5.46)	210
<i>Cognitive well-being</i>												
10. Satisfaction with Life	<b>.15*</b>	<b>.33***</b>	.13	<b>.20**</b>	<b>-.22**</b>	<b>-.26***</b>	<b>-.62***</b>	<b>-.51***</b>	<b>-.49***</b>	-	21.25 (7.44)	212
11. Momentary Self-Worth	<b>.27***</b>	<b>.14*</b>	.05	<b>.26***</b>	<b>-.30***</b>	<b>-.35***</b>	<b>-.61***</b>	<b>-.42***</b>	<b>-.42***</b>	<b>.64***</b>	21.51 (5.14)	215

*Notes:* \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ ; statistically significant coefficients are presented in boldface. <sup>a</sup>Relationship Status measured as a categorical variable (0 = single, 1 = in a relationship). TMFS = Traditional Masculinity-Femininity Scale, higher scores indicate masculine gender expression. Higher political ideology responses indicate a progressive orientation on social issues. Correlation coefficients with relationship status indicate Spearman's Rho coefficient, all other coefficients are Pearson product-moment correlation coefficients.

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Table 2

*Unstandardised (B), Standardised ( $\beta$ ), and Semi-Partial Correlation Coefficients ( $Sr^2$ ) for Predictors in a Regression Model Predicting Mental Well-Being.*

	Depression ( <i>n</i> = 208)				Anxiety ( <i>n</i> = 210)				Stress ( <i>n</i> = 210)			
	<i>B</i> [95% CI]	<i>SE B</i>	$\beta$	<i>Sr</i> <sup>2</sup>	<i>B</i> [95% CI]	<i>SE B</i>	$\beta$	<i>Sr</i> <sup>2</sup>	<i>B</i> [95% CI]	<i>SE B</i>	$\beta$	<i>Sr</i> <sup>2</sup>
Step 1												
Constant	1.31 [0.97, 1.65]	0.17			1.22 [0.91, 1.53]	0.16			1.36 [1.05, 1.67]	0.16		
Age	<b>0.00 [-0.01, -0.00]</b>	<b>0.00</b>	<b>-0.14*</b>	<b>-.14</b>	<b>-0.01 [-0.01, -0.00]</b>	<b>0.00</b>	<b>-0.29***</b>	<b>-.28</b>	<b>-0.01 [-0.01, -0.00]</b>	<b>0.00</b>	<b>-0.28***</b>	<b>-.27</b>
Relationship Status <sup>a</sup>	<b>-0.18 [-0.30, -0.07]</b>	<b>0.06</b>	<b>-0.21**</b>	<b>-.21</b>	<b>-0.12 [-0.22, -0.02]</b>	<b>0.05</b>	<b>-0.15*</b>	<b>-.15</b>	<b>-0.10 [-0.21, -0.00]</b>	<b>0.05</b>	<b>-0.13*</b>	<b>-.13</b>
TMFS	-0.01 [-0.02, 0.00]	0.01	-0.12	-.11	-0.01 [-0.02, 0.00]	0.00	-0.09	-.09	-0.01 [-0.02, 0.00]	0.00	-0.08	-.08
Step 2												
Constant	0.79	0.22			0.91 [0.50, 1.31]	0.21			1.03 [0.63, 1.44]	0.21		
Age	-0.00 [-0.01, 0.00]	0.00	-0.10	-.09	<b>-0.01 [-0.01, -0.00]</b>	<b>0.00</b>	<b>-0.28***</b>	<b>-.26</b>	<b>-0.01 [-0.01, -0.00]</b>	<b>0.00</b>	<b>-0.27***</b>	<b>-.25</b>
Relationship Status <sup>a</sup>	<b>-0.16 [-0.27, -0.04]</b>	<b>0.06</b>	<b>-0.18**</b>	<b>-.18</b>	-0.09 [-0.20, 0.01]	0.05	-0.11	-.11	-0.07 [-0.18, 0.03]	0.05	-0.09	-.09
TMFS	-0.01 [-0.02, 0.00]	0.01	-0.10	-.10	-0.01 [-0.02, 0.00]	0.00	-0.08	-.08	-0.01 [-0.01, 0.00]	0.00	-0.07	-.07
Self-Stereotype Endorsement	<b>0.02 [0.00, 0.03]</b>	<b>0.01</b>	<b>0.19*</b>	<b>.14</b>	<b>0.02 [0.00, 0.03]</b>	<b>0.01</b>	<b>0.23**</b>	<b>.17</b>	<b>0.02 [0.01, 0.03]</b>	<b>0.01</b>	<b>0.25**</b>	<b>.19</b>
Meta-Stereotype Endorsement	0.00 [-0.01, 0.01]	0.01	0.06	.04	-0.01 [-0.02, 0.00]	0.01	-0.09	-.07	-0.01 [-0.02, 0.00]	0.01	-0.10	-.07

*Notes:* Dummy coded variables: <sup>a</sup>0 = single, 1 = in a relationship. TMFS = Traditional Masculinity-Femininity Scale (higher scores = more masculine). CI = Confidence Intervals \**p* < .05, \*\**p* < .01, \*\*\**p* < .001. Significant findings presented in boldface.

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Table 3

*Unstandardised (B), Standardised ( $\beta$ ), and Semi-Partial Correlation Coefficients ( $Sr^2$ ) for Predictors in a Regression Model Predicting Cognitive Well-Being.*

	Satisfaction with Life ( $n = 212$ )				Momentary Self-Worth ( $n = 215$ )			
	<i>B</i> [95% CI]	<i>SE B</i>	$\beta$	$Sr^2$	<i>B</i> [95% CI]	<i>SE B</i>	$\beta$	$Sr^2$
<i>Step 1</i>								
Constant	6.49 [0.85, 12.12]	2.86			27.59 [27.32, 27.86]	0.14		
Age	0.04 [-0.03, 0.12]	0.04	0.08	.08	<b>0.01 [0.00, 0.01]</b>	<b>0.00</b>	<b>0.21**</b>	<b>.20</b>
Relationship Status <sup>a</sup>	<b>4.74 [2.86, 6.63]</b>	<b>0.96</b>	<b>0.32***</b>	<b>.32</b>	0.06 [-0.03, 0.15]	0.05	0.09	.09
TMFS	<b>0.22 [0.04, 0.39]</b>	<b>0.09</b>	<b>0.16*</b>	<b>.16</b>	<b>0.01 [0.00, 0.02]</b>	<b>0.00</b>	<b>0.20**</b>	<b>.19</b>
<i>Step 2</i>								
Constant	13.55 [6.27, 20.84]	3.80			28.09 [27.74, 28.43]	0.17		
Age	0.01 [-0.06, 0.09]	0.04	0.03	.02	<b>0.00 [0.00, 0.01]</b>	<b>0.00</b>	<b>0.14*</b>	<b>.13</b>
Relationship Status <sup>a</sup>	<b>4.79 [2.91, 6.67]</b>	<b>0.95</b>	<b>0.32***</b>	<b>.31</b>	0.06 [-0.03, 0.15]	0.05	0.09	.08
TMFS	<b>0.20 [0.03, 0.37]</b>	<b>0.09</b>	<b>0.15*</b>	<b>.14</b>	<b>0.01 [0.00, 0.02]</b>	<b>0.00</b>	<b>0.17**</b>	<b>.17</b>
Self-Stereotype Endorsement	0.01 [-0.22, 0.24]	0.12	0.01	.01	0.00 [-0.02, 0.01]	0.01	-0.7	-.05
Meta-Stereotype Endorsement	<b>-0.25 [-0.44, -0.07]</b>	<b>0.09</b>	<b>-0.23**</b>	<b>-.17</b>	<b>-0.01 [-0.02, -0.00]</b>	<b>0.00</b>	<b>-0.25**</b>	<b>-.18</b>

*Notes:* Dummy coded variable: <sup>a</sup>0 = Single, 1 = in a relationship. TMFS = Traditional Masculinity-Femininity Scale (higher scores = more masculine). CI = Confidence Intervals. \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ . Significant findings presented in boldface.