

# Religion and spirituality: Pathways to positive body image

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## ABSTRACT

Positive body image is a multidimensional construct referring to love, respect, and acceptance of one's body, including aspects inconsistent with sociocultural ideals. The aim of the present study was to investigate potential pathways leading from religion and spirituality to positive body image. Participants were 345 women who completed questionnaire measures of engagement with formal religion, spirituality, gratitude, self-objectification, and positive body image. Both engagement with formal religion and spirituality were found to be positively associated with positive body image. Further, mediation analyses showed that the relationship between spirituality and positive body image was mediated by gratitude and reduced self-objectification. It was concluded that a broader spiritual consciousness may assist women to develop a loving, appreciative, and respectful relationship with their bodies. In addition, gratitude and a de-emphasis on external appearance provide useful goals and potential intervention points for promoting positive body image.

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## 1. Introduction

Body image has been described as a complex and multi-faceted construct encompassing all aspects of how people experience their bodies (Pruzinsky & Cash, 2002). Despite this broad conceptualization, both theorizing and research have been largely pathology driven, with a particular narrow focus on dissatisfaction with body shape and weight (Smolak & Cash, 2011). Recently, it has been argued that such a negative focus serves to not only inhibit the complete understanding of body image, but also to limit potential treatment and prevention strategies (Tylka, 2011). Thus, in line with the wider positive psychology movement that aims to investigate factors that foster resilience, contribute to well-being, and allow individuals to thrive (Seligman & Csikszentmihalyi, 2000), contemporary research attention has turned toward positive, as opposed to negative, body image.

Positive body image is a multidimensional construct referring to love, respect, and acceptance of one's body, including aspects inconsistent with sociocultural ideals, and appreciation of the body's uniqueness and the functions it performs (Tylka & Wood-Barcalow, 2015a; Tylka, 2011). It is conceptualized as something more than the mere absence of body dissatisfaction; nor is it sim-

ply the polar opposite of negative body image. In support, initial qualitative studies identified characteristics such as a sense of inner positivity, a functional view of the body, and an encompassing view of beauty (Wood-Barcalow, Tylka, & Augustus-Horvath, 2010). In addition, a number of quantitative studies have shown positive body image to be uniquely (over and above negative body image) associated with a range of positive outcomes, including optimism (Avalos, Tylka, & Wood-Barcalow, 2005), self-esteem (Avalos et al., 2005; Tylka & Wood-Barcalow, 2015b), adaptive eating (Tylka & Wood-Barcalow, 2015b), and self-care health behaviours (Andrew, Tiggemann, & Clark, 2016a). Positive body image has also been found to be protective against negative effects on mood and state body satisfaction in experimental studies of media exposure (Andrew, Tiggemann, & Clark, 2015a; Halliwell, 2013).

Tylka (2011, 2012) has proposed that one characteristic that promotes and maintains positive body image is religion or spirituality, in particular, belief in a higher power that thoughtfully designs each person to be unique. This proposition was based on Wood-Barcalow et al.'s (2010) observation that the majority of their college sample with positive body image reported that their religion assisted them in this. These women described how they believed that they were created to be special in their own way, and that God was living inside them and wanted them to accept and take care of their body. Although the positive impact of religion and spirituality on general well-being has been well documented (e.g., George, Larsons, Koenig, & McCullough, 2000; Koenig, 2009;

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Powell, Shahabi, & Thoresen, 2003), Tylka's proposition concerning positive body image has not yet been tested empirically.

While there is no single agreed upon definition, religion is most often described as an organized and shared system of beliefs where members of an institution come together to worship a higher power or God (Cragun, Hammer, & Nielsen, 2015; Zwingmann, Klein, & Bussing, 2011). Spirituality is a broader concept that is more difficult to define. It can be seen as tied to religion as the name itself infers a 'spirit' is present (Cragun et al., 2015; Koenig, 2009). On the other hand, spirituality is increasingly conceptualized as an individual experience involving connectedness and a search for personal fulfilment, peace, and meaning in life (Koenig, 2009; Weathers, McCarthy, & Coffey, 2015; Zwingmann et al., 2011), with little connection to religion (or accompanying belief in a God). Nevertheless, one would expect spiritual individuals to experience a more accepting, loving, and favourable relationship with their body in light of their appreciation of and felt connection with the self, other people, nature, and the world (Weathers et al., 2015).

Existing research investigating relationships between religion, spirituality, and body image has largely utilized measures of negative body image and disordered eating, and produced inconsistent results. The majority of studies have found that religion and spirituality are associated with less negative body image and lower levels of eating disturbance (e.g., Boyatzis & Quinlan, 2008; Henderson & Ellison, 2015). Yet other studies have found no relationship (Feinson & Hornik-Lurie, 2016; Hayman et al., 2007), or a positive association with poor body image and disturbed eating (e.g., Barker & Galambos, 2003; Exline, Homolka, & Harriott, 2015). The major theoretical framework used in these studies is attachment theory, whereby God is seen as an attachment figure who can provide security and comfort (Hill & Pargament, 2003). Indeed, the major conclusion of a recent systematic review of this literature was that internalized religious beliefs coupled with a satisfying relationship with God are associated with lower levels of disordered eating and body image concern, but superficial faith and anxious relationships with God are associated with high levels of body image disturbance (Akrawi, Bartrop, Potter, & Touyz, 2015). The authors noted, however, that this research is largely limited to religious (Judeo-Christian) samples.

As yet, little research has looked beyond body satisfaction or dissatisfaction and eating disturbances. To the best of our knowledge, only two studies have addressed one specific aspect of religion and positive body image. In samples of Christian undergraduate students, a secure (non-anxious) attachment to God was found to be associated with positive body image (Homan & Cavanaugh, 2013) and to attenuate the negative relationship between social comparison and positive body image (Homan & Lemmon, 2016). In investigating the nature of attachment to God, these studies are limited to religious samples. Thus, the first aim of the present study was to investigate whether religion and spirituality more broadly are indeed linked to positive body image in a general sample.

The second aim was to investigate potential pathways by which religion and spirituality might be connected to positive body image. The mechanisms linking religion and spirituality to general well-being are not clear (Haney & Rollock, 2018), but suggested possibilities include social support and resources for coping with stressful events (Koenig, 2009). Hill and Pargament (2003) see religion and spirituality as overarching frameworks that orient people to the world and provide motivation and direction for living. With respect to body image, the major theoretical concept of attachment to God is not particularly useful for non-religious samples or for the broader concept of spirituality. On the basis of existing knowledge about positive body image, we propose two particular pathways: the first through gratitude and the second through reduced self-objectification.

McCullough, Emmons, and Tsang (2002) describe gratitude or thankfulness as an enduring trait. Individuals with a grateful disposition feel more intensely grateful, feel grateful more often, and are grateful in more areas of their life than their counterparts who are not dispositionally grateful. Multiple studies have demonstrated that gratitude is positively correlated with a wide variety of indicators of physical and emotional well-being (Emmons & McCullough, 2003; McCullough et al., 2002; Watkins, Woodward, Stone, & Kolts, 2003; Wood, Froh, & Geraghty, 2010). One recent study has shown gratitude to be also associated with positive body image (Homan & Tylka, 2018). Further, gratitude is a foundational part of many religions. For example, traditional Christian households say grace and give thanks at meal times. In monotheistic religions more generally, gratitude to God for the many gifts and mercies bestowed are common themes in worship (Aghababaei, Blachnio, & Aminikhoo, 2018). More spiritual individuals are also likely to feel gratitude as part of their felt connection to others and to the natural world (Weathers et al., 2015). In support, both religiousness and (non-denominational) spirituality have been found to be positively correlated with gratitude (Aghababaei et al., 2018; Emmons & Kneezel, 2005).

The second proposed pathway through which religion and spirituality may be related to positive body image is via reduced self-objectification. According to objectification theory (Fredrickson & Roberts, 1997), self-objectification is the process by which contemporary cultural practices in which women's bodies are objectified work to gradually socialize women and girls to internalize an observer's perspective on themselves. Self-objectification is manifest in continual monitoring of how one appears to the outside world. It has been linked to a number of adverse mental health consequences, including body dissatisfaction, depressive symptoms, poor sexual functioning, and disordered eating (for a review, see Tiggemann, 2011). There is also a body of research linking reduced self-objectification to positive body image. This is one of the specific links proposed in the acceptance model of intuitive eating (Avalos & Tylka, 2006), which has garnered considerable support in samples of college women (Andrew, Tiggemann, & Clark, 2016b; Avalos & Tylka, 2006; Oh, Wiseman, Hendrickson, Phillips, & Hayden, 2012; Tylka & Homan, 2015), community women (Augustus-Horvath & Tylka, 2011), and adolescent girls (Andrew, Tiggemann, & Clark, 2015b; Andrew, Tiggemann, & Clark, 2016c). Furthermore, certain religious beliefs, such as the belief that one is created to be unique by a higher being or that one's body is housing God, almost definitionally imply a reduced focus on external physical appearance. In addition, it has been suggested that a secure attachment to God confers unconditional acceptance that makes individuals less likely to turn to external sources for approval (Homan & Cavanaugh, 2013). Likewise, we propose that having a spiritual outlook that fosters motivation to find meaning in life beyond oneself (Koenig, 2009), would lead individuals to place greater value on the internal rather than external characteristics of themselves and others and result in reduced self-objectification. To the best of our knowledge, however, there is no existing research on the relationship between religion or spirituality and self-objectification.

In sum, the first aim of the present study was to empirically investigate the relationship between religion and spirituality with positive body image. On the basis of the existing qualitative accounts (Wood-Barcalow et al., 2010) and the above reasoning, it was predicted that both formal religion and spirituality would be positively associated with positive body image. The second aim was to investigate possible mechanisms. In particular, we propose two pathways by which spirituality (the broader construct) will be connected to positive body image: through gratitude and through reduced self-objectification. Accordingly, it was predicted that spirituality would be positively related to gratitude and negatively

related to self-objectification, which, in turn, would be related (positively and negatively, respectively) to positive body image. More formally, gratitude and self-objectification were predicted to mediate the relationship between spirituality and positive body image.

## 2. Method

### 2.1. Participants

Participants were 345 women aged 18 to 69 years ( $M = 30.93$ ,  $SD = 12.29$ ) recruited from a variety of sources, including Flinders university undergraduate students and members of the wider community. The great majority identified as Caucasian/White (89%), with 3.5% Asian, 1.2% Aboriginal, 1.2% African, and 3.8% 'other.' In terms of marital status, 42% were single and 44.7% were either married or in a de-facto relationship. More than half of the participants (58.6%) had completed some sort of post-high school education. The average body mass index (BMI) was 26.41 ( $SD = 6.49$ ), in line with Australian statistics for adult women (Australian Bureau of Statistics, 2011).

### 2.2. Measures

All participants completed an online questionnaire entitled "Belief Systems and Body Image" that contained the following measures in order of presentation. Basic demographic information (age, height, weight, ethnicity, education level, relationship status) was obtained at the end of the questionnaire.

#### 2.2.1. Religion

To assess engagement with formal religion, participants were asked which religion (if any) they most identified with, which religious communities (if any) they belonged to, and how often they attended religious services (*never, once or twice a year, every few months, 1–4 times a month, more than once a week*). In line with previous definitions of religious engagement (Cragun et al., 2015; Zwingmann et al., 2011), we classified participants as formally religious if they identified with a particular religion and attended religious services at least every few months, and otherwise as not formally religious.

#### 2.2.2. Spirituality

Spirituality was measured by the Individualistic Spirituality Subscale of the NonReligious-NonSpiritual Scale developed by Cragun et al. (2015) to be suitable for non-religious participants. The Individualistic Spirituality Subscale contains nine items, e.g., "I feel a sense of connection to something beyond what we can observe, measure, or test scientifically"; "Spirituality is important to me." Responses are made on a 5-point scale (1 = *strongly agree*, 5 = *strongly disagree*) and averaged to produce a score ranging from 1 to 5, here scored in the direction of higher scores indicating higher spirituality. Exploratory and confirmatory factor analysis of the whole measure by Cragun et al. (2015) confirmed that the subscale items formed a distinct spirituality factor among college students. Cragun et al. also provide evidence for convergent validity, whereby the measure correlated with other measures of religiousness and spirituality. In the present sample, the spirituality measure demonstrated high internal consistency ( $\alpha = .93$ ).

#### 2.2.3. Positive body image

Positive body image was assessed with the Body Appreciation Scale-2 (BAS-2) of Tylka and Wood-Barcalow (2015b). This 10-item scale contains items addressing acceptance, appreciation, respect, and favourable opinions towards one's body (e.g., "I respect my body"; "I appreciate the different and unique characteristics of

my body"). Responses are made on a 5-point scale (1 = *never*, 5 = *always*) and averaged, with higher scores indicating greater positive body image. The BAS-2 has demonstrated high internal consistency for women ( $\alpha = .94$ ) and high test-retest reliability over 3 weeks ( $r = .90$ ; Tylka & Wood-Barcalow, 2015b). Internal consistency was similarly high in the present sample ( $\alpha = .95$ ).

#### 2.2.4. Self-objectification

Self-objectification was measured by the Surveillance Subscale of the Objectified Body Consciousness Scale (McKinley & Hyde, 1996). This 8-item scale assesses the extent to which individuals monitor their external appearance and focus on how they look as opposed to how they feel (e.g., "During the day, I think about how I look many times"). Items are rated on a 7-point scale (1 = *strongly disagree*, 7 = *strongly agree*) and summed. Total scores range from 8 to 56, with higher scores indicating greater self-objectification. The scale has reasonable 2-week test-retest reliability ( $r = .73$ ) and internal consistency among women ( $\alpha = .76-.89$ ; McKinley & Hyde, 1996). Internal consistency in the present sample was similar ( $\alpha = .83$ ).

#### 2.2.5. Gratitude

Gratitude was measured by the Gratitude Questionnaire-Six Item Form (GQ-6) of McCullough et al. (2002). Items cover a number of settings (e.g., "I have so much in life to be thankful for"; "I am grateful to a wide variety of people") and are rated on a 7-point scale (1 = *strongly disagree*, 7 = *strongly agree*) and summed. Thus, the total score ranges from 6 to 42, with higher scores indicate greater gratitude. The measure has demonstrated a clear 1-factor structure and reasonable internal consistency ( $\alpha = .82$ ; (McCullough et al., 2002). In the present sample, internal consistency was similar ( $\alpha = .83$ ).

### 2.3. Procedure

In order to obtain a broad range of participants, a professional social media page was created with details of and link to the questionnaire. A number of professional and community groups, including both religious (e.g., the Uniting Church) and non-religious (e.g., local educational College) organisations, were invited to share the page with their members through email or social media. Volunteer undergraduate university students were also able to access the link to the questionnaire through an on-line research participation system. All participants were provided with an initial letter of introduction and information sheet detailing the voluntary and confidential nature of the study. The questionnaire was run via the Qualtrics platform on a secure University server and took 15–20 minutes to complete. Undergraduate university students received course credit for their participation, while members of the wider community received no recompense. This protocol had gained prior approval by the Institutional Research Ethics Committee.

## 3. Results

There were no missing data on any of the scales. While some demographic items were missing, demographic data were not considered in the analyses.

### 3.1. Religious affiliation and engagement

As can be seen in Table 1, approximately half the participants identified with a particular religion and half did not ('none'). Of those who did identify with a religion, Christianity was by far the most common. Around 80% of participants attend church either never or only one to two times a year. According to our definition of engagement in formal religion (identification with a religion

**Table 1**  
Religious Identification of the Sample.

	<i>n</i>	%
Religion		
Christian	136	39.4
Buddhism	5	1.4
Hindu	6	1.7
None	172	49.9
Other	26	7.5
Religious service attendance		
Never	197	57.1
1–2 times a year	79	22.9
Every few months	27	7.8
1–4 times a month	31	9.0
More than once a week	11	3.2

**Table 2**  
Means (SD) by formal religious group.

	Range	Religious	Non-Religious	
Spirituality	1 – 5	3.90 (0.66)	2.69 (0.89)	**
Gratitude	18 – 42	37.03(4.60)	34.74 (5.50)	*
Self-Objectification	14 – 56	34.76(8.58)	35.90 (8.13)	
Positive Body Image	1 – 5	3.64 (0.66)	3.29 (0.84)	**

\*  $p < .01$ .\*\*  $p < .001$ .**Table 3**  
Correlations between predictor and criterion variables.

	Gratitude	Self-Objectification	Positive Body Image
Spirituality	.26**	-.14**	.23**
Gratitude		-.11*	.39**
Self-Objectification			-.41**

\*  $p < .05$ .\*\*  $p < .01$ .

and attendance at religious services at least every few months), 67 participants (19.4%) were classified as religious and 278 as not religious.

### 3.2. Religion and positive body image

Table 2 presents the means on positive body image and other variables for the religious and non-religious groups. All variables had near-normal distributions (skewness < 1, kurtosis < 1) and met the assumption of homogeneity of variance. An independent samples *t*-test showed that, as predicted, religious participants had significantly higher positive body image ( $M = 3.64$ ,  $SD = 0.66$ ) than those categorized as not religious ( $M = 3.29$ ,  $SD = 0.84$ ),  $t(343) = 3.25$ ,  $p = .001$ . The size of this effect was moderate,  $d = 0.45$ . Religious participants also scored significantly higher on spirituality,  $t(343) = 10.46$ ,  $p < .001$ ,  $d = 1.54$ , and gratitude,  $t(343) = 3.15$ ,  $p = .002$ ,  $d = 0.45$ , than their non-religious counterparts, but did not differ on self-objectification,  $t(343) = 1.02$ ,  $p = .310$ ,  $d = 0.14$ .

### 3.3. Spirituality and positive body image

As can be seen in Table 3, which presents the correlations between variables, spirituality was significantly positively correlated with positive body image as predicted. It was also correlated positively with gratitude, and negatively with self-objectification.

### 3.4. The mediating role of gratitude and self-objectification

It was predicted that gratitude and self-objectification would act as mediators of the relationship between spirituality and positive body image. To formally test the proposed pathways, a parallel mediation analysis was conducted using Model 4 in PROCESS

(Hayes, 2012). The significance of the indirect effect was assessed using bias-corrected confidence intervals estimated from 10,000 bootstrap samples. In this approach, evidence for a statistically significant effect is obtained when the 95% confidence interval does not contain zero.

Fig. 1 shows the resulting standardised path coefficients for the model. All individual paths were significant and in the predicted direction. Specifically, spirituality was positively associated with gratitude, and gratitude positively associated with positive body image. In addition, spirituality was negatively associated with self-objectification, and self-objectification was negatively associated with positive body image. Together, the variables accounted for 29.7% of the variance in positive body image,  $R = .545$ ,  $R^2 = .297$ ,  $F(3, 341) = 48.01$ ,  $p < .001$ . More importantly, the test of the indirect effect of spirituality on positive body image through gratitude and self-objectification proved significant,  $b = .11$ ,  $\beta = .13$ , CI [.07, .17]. The total effect of spirituality on positive body image was reduced from a significant  $b = .19$ ,  $\beta = .23$ ,  $p < .001$ , to a marginally significant direct effect,  $b = .08$ ,  $\beta = .10$ ,  $p = .043$ , once gratitude and self-objectification were taken into account.

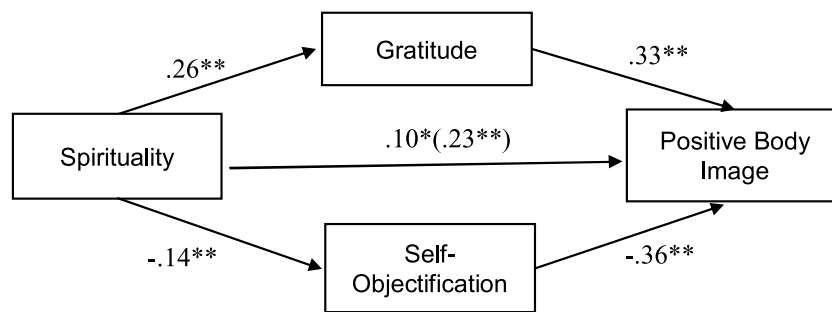
The separate individual mediations by gratitude and self-objectification were also tested. The indirect effect of spirituality on positive body image through gratitude (alone) was significant,  $b = .07$ ,  $\beta = .08$ , CI [.04, .11]. Likewise, the indirect effect through self-objectification (alone) was also significant  $b = .04$ ,  $\beta = .05$ , CI [.01, .08]. Thus, gratitude and self-objectification independently mediated the relationship between spirituality and positive body image.

## 4. Discussion

The overarching purpose of the present study was to elucidate the nature of the relationship between religion or spirituality and positive body image. The major findings are clear. First, engagement in formal religion and spirituality were both related to having a positive body image. Second, gratitude and reduced self-objectification provided demonstrated pathways by which spirituality was associated with positive body image.

The first finding offers empirical support to the proposition (Tylka, 2011, 2012) that religion and/or spirituality are characteristics that promote positive body image. This proposition had itself been based upon qualitative observations made by Wood-Barcalow et al. (2010) that many of their participants attributed their positive body image, at least in part, to their religious beliefs. As predicted, women who engaged in formal religious practices had significantly higher positive body image than women who did not. In addition, the more spiritual women were, the greater their positive body image. To our knowledge, the present finding represents the first empirical demonstration of these relationships. More generally, it extends the existing body of research linking religion and spirituality to a variety of forms of psychological well-being (Cotton, Zebracki, Rosenthal, Tsevat, & Drotar, 2006; George et al., 2000; Koenig, 2009) to include positive body image.

Although religion and spirituality were confirmed as characteristics that promote and maintain positive body image, we did not investigate the specific belief(s) or belief system(s) involved. For example, Wood-Barcalow et al. (2010) and Tylka (2011, 2012) articulate potentially helpful religious beliefs surrounding the body, including the belief that the body is created by God to be unique, and the belief that the body houses God. The latter is formalized in many Christian denominations (the major religion in the present sample) through the act of taking Holy Communion or Eucharist, that is, the consumption of bread and wine to symbolise the body and blood of Christ. Another relevant belief might be the belief that individuals are made in the image of God. Spirituality, on the other



**Fig. 1.** Mediation model showing standardised regression coefficients. The number in parentheses is the regression coefficient for the direct effect of spirituality on positive body image without the mediation. \* $p < .05$ . \*\* $p < .01$ .

hand, does not necessarily involve any doctrinal beliefs. Indeed, an increasing number of people claim to be spiritual but not religious, a concept referred to as secular spirituality (Zwingmann et al., 2011). In the present study, although religious people were more spiritual than their non-religious counterparts, relationships with all other variables were not the same. In particular, self-objectification was negatively related to spirituality, but not to religion (religious and non-religious people did not differ on level of self-objectification). This supports the view that, although overlapping, the two constructs are distinct from one another. For spirituality, relevant beliefs might concern one's place in the universe or connection to all things. Accordingly, future research might attempt to delineate the content of useful cognitions and beliefs associated with positive body image.

Our second major finding that the relationship between spirituality and positive body image was mediated by gratitude and reduced self-objectification, contributes to a fuller and richer understanding of the relationship. Two independent pathways to positive body image were identified. In the first, spiritual women were more grateful, which led to greater positive body image. The observed positive relationship between spirituality and gratitude confirms previous research that suggests that spiritual individuals feel gratitude as part of their feeling of connectedness with, and responsibility for, nature and other people (Emmons & Kneezel, 2005). This general grateful disposition may then bring about feelings of appreciation and gratitude for the health and functionality of their bodies, as expressed by Wood-Barcalow et al.'s (2010) participants and regarded as a key feature of positive body image (Tylka, 2012). The observed positive relationship between gratitude and positive body image adds valuable empirical evidence to this suggestion. It also replicates in a different cultural context (Australian community sample vs US MTurk workers) the initial finding of Homan and Tylka (2018).

The second pathway identified from spirituality to positive body image was through reduced self-objectification. In the present sample of women, spirituality was associated with reduced self-objectification, which in turn was associated with higher positive body image. The observed negative relationship between self-objectification and positive body image confirms in a new sample a relationship that has been demonstrated a number of times previously (Andrew et al., 2015b, 2016b; Augustus-Horvath & Tylka, 2011; Avalos & Tylka, 2006; Oh et al., 2012; Tylka & Homan, 2015). In contrast, the observed negative relationship between spirituality and self-objectification is a novel finding, but one that makes logical sense. Spirituality involves a search for personal fulfilment, peace, and meaning in life (Koenig, 2009), all of which go well beyond concern with external physical appearance.

The real contribution of the present study, however, lies not in the individual bivariate relationships, but in the putting of them all together in a way not done before. Indeed, to our knowledge, the present study represents the first attempt to inves-

tigate how spirituality might translate into positive body image. Here we established gratitude and reduced self-objectification as mechanisms by which spirituality can promote and maintain a positive body image. It needs to be acknowledged, however, that the direct effect of spirituality on positive body image remained marginally significant after taking into account gratitude and self-objectification. This suggests that there are other additional components to spirituality (beyond gratitude and reduced self-objectification) that contribute to positive body image. This is not surprising given that spirituality is such a broad construct. One possibility is body acceptance from important others in one's life, which has been identified as one of the most robust predictors of positive body image (for a review, see Tiggemann, 2019). Spiritual individuals (with positive body image) are likely to choose to surround themselves and connect with like-minded others, and thus create and exist within a highly supportive and accepting environment. Other possibilities include a sense of awe and wonder, a broader conception of beauty, or a felt connection to nature. The latter two of these have been shown to be related to positive body image in other contexts (Swami, Barron, & Furnham, 2018; Swami, Pickering, Barron, & Patel, 2018; Tylka & Iannantuono, 2016). In addition, religion and spirituality have been shown to provide a source of strength and tools for coping with life stressors (Koenig, 2009; Shaw, Joseph, & Linley, 2005), which may extend to more effective coping with societal pressures and the ubiquitous negative media messages surrounding the body and appearance ("protective filtering"; Tylka, 2011). This, in turn, might result in lower levels of social comparison on the basis of appearance, shown to be negatively related to positive body image (Andrew et al., 2015b, 2016b; Homan & Lemmon, 2016). Future research could usefully seek to identify these and other suggested mechanisms for how spirituality translates into positive body image.

The set of findings has some important practical implications. While it is not practicable to encourage religious faith or church attendance in an effort to promote women's positive body image, it is possible to encourage practices and beliefs associated with spirituality. For example, activities such as meditation, mindfulness exercises, and guided breathing can all serve to potentially enhance a more spiritual consciousness. In addition, among religious participants, religious affirmations about the body have been shown to enhance feelings about the body (Boyatzis, Kline, & Backof, 2007; Inman, Iceberg, & McKeel, 2014; Inman, Snyder, & Peprah, 2016). The pathways identified by the mediation analyses also suggest two other perhaps more readily modifiable targets for intervention, namely, gratitude and self-objectification. If women could be encouraged or educated to increase their levels of gratitude and/or decrease their levels of self-objectification, they should enjoy the benefits of higher levels of positive body image. Fortunately, there exist known and robust strategies to increase gratitude, such as keeping a daily gratitude diary or writing letters of thanks (Davis et al., 2016; Dunaev, Markey, & Brochu, 2018;

Emmons & McCullough, 2003). Likewise, there are a number of suggested strategies for reducing self-objectification (Tiggemann, 2013). These include engaging in embodying activities (those that are 'in' the body and facilitate mind-body integration), such as competitive athletics (Menzel & Levine, 2011) or yoga (Mahlo & Tiggemann, 2016). Not only would such changes in gratitude and self-objectification result in more positive body image, but also in enhanced psychological well-being more broadly.

As with all research, the present findings need to be considered in light of a number of limitations. First, while a broad sample of community and university women was obtained, the sample was overwhelmingly White. Consequently, the results may not generalize to more ethnically diverse samples or women in other geographical locations. In addition, women self-selected into the study and so may have been more interested in religion and spirituality than those who chose not to participate, although it should be noted that half the sample did not identify with any religion ('none') and spirituality was normally distributed. Second, the study (like the majority of body image research) included only women. Future research might investigate whether the same relationships hold for men. There is reason to suspect that they may not, as there is a reliable gender difference in spirituality, whereby men are generally less spiritual than women (Duffy, 2010). In addition, as pointed out by Homan and Tylka (2018), masculinity norms work to discourage men from experiencing and expressing gratitude (Kashdan, Mishra, Breen, & Froh, 2009). The concept of self-objectification is also less relevant for men (Fredrickson & Roberts, 1997). Thus, the pathways to positive body image identified here for women may not be as salient for men. Finally, the present study is correlational and cross-sectional in design. Thus, we cannot unambiguously conclude that being religious or spiritual causally leads to positive body image. Although this ordering does seem the most likely (the reverse causal direction is less plausible), it is still possible that the relationship is determined by some third (unmeasured) variable. Future research needs to investigate conversion to religious faith and track the development of both spirituality and positive body image over some time in order to confirm this conclusion.

Despite the identified limitations, the present study has demonstrated that both religion and spirituality are positively related to positive body image. In so doing, it has both extended knowledge about the positive effects of religion and spirituality to a new domain, and contributed to a greater understanding of positive body image more broadly. The demonstrated mediation of the relationship between spirituality and positive body image by gratitude and reduced self-objectification also offers a practical contribution in identifying potential targets for intervention. Together, the findings suggest that religion and spirituality may enable women to experience a loving, appreciative, and respectful relationship with their bodies, and accordingly, provide a valuable counterpoint to the appearance pressures inherent in contemporary Western societies.

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