



Exploring body image, strength of faith, and media exposure among three denominations of Jewish women

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Abstract

Body image dissatisfaction has been associated with harmful effects on the psychological well-being of women in western societies. Religion has been suggested to be a protective factor against body image dissatisfaction, though its precise mechanisms are not fully understood. Thus, the present study investigated the relationship between religious denominations and body image, both positive and negative. Further, it examined strength of religious faith, media exposure, and modesty, as possible mediating factors underlying this relationship. Participants were 483 Jewish women belonging to ultra-Orthodox, modern-Orthodox, or to a secular population. All factors were measured by self-report questionnaires. Findings revealed that compared to secular Jewish women, ultra-Orthodox Jewish women maintain more positive attitudes regarding their bodies, and suffer less from body image dissatisfaction. Importantly, positive and negative body image had unique effects: Positive body image differed between the Ultra-Orthodox group and the other two groups, and this relationship was fully mediated both by media exposure and by strength of religious faith. For negative body image, secular women differed from the two other groups, and this relationship was fully mediated only by media exposure. These findings are discussed in light of sociocultural influences, and related clinical implications.

Keywords Body image · Strength of religious faith · Media exposure · Women · Judaism

Women in Western Societies are being subjected to unrealistic cultural ideals of weight and shape, the result of which is body

dissatisfaction. The sociocultural model of body image assumes that these ideals of beauty, transmitted via various channels, are internalized by the individual. Thus, body satisfaction or dissatisfaction becomes a function of the extent to which an individual perceives the way he/she meets these beauty standards (Tiggemann 2011). Notably, body dissatisfaction has been identified as a major risk factor for eating disorders, and as a predictor of low self-esteem, depression, and obesity (Grabe et al. 2007). Therefore, it is vital, for scholars and clinicians alike, to thoroughly understand the possible factors affecting and contributing to body image satisfaction and dissatisfaction, through both the positive and the negative dimensions of the body (Tylka 2011).

Within the cultural context of body image, religion has been receiving increasing empirical attention as a strong factor shaping and influencing individuals' attitudes and behaviors in relation to the body (e.g. Christel et al. 2012). Specifically, religious identity has been considered a potential buffer against eating disorders and body image dissatisfaction (Boyatzis and Quinlan 2008; Homan and Boyatzis 2010; Handelzalts et al. 2017; Jackson and Bergeman 2011). Moreover, as religion instills life with a sense of purpose and meaningfulness, it may allow individuals to refer to their

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body more positively (Homan and Boyatzis 2010). For example, Mahoney et al. (2005) found that body sanctification was positively related to appearance and body composition satisfaction in a mostly Christian student population. In a similar population, Kim (2006) found in both males and females that some aspects of religiosity (e.g. positive religious coping) were associated with increased body satisfaction. Moreover, the association between religion and positive body image has been shown experimentally, demonstrating that reading religious or spiritual affirmations about the body promoted positive thinking about one's appearance (Boyatzis et al. 2007).

However, other studies paint a more complex picture regarding the role of religion in body image satisfaction. For example, Goulet et al. (2017) recently examined specific attributes of religion and their associated with body image in Catholic-affiliated university students. They found that while some aspects of religion (e.g. spirituality) were positively related to body image, others (religious meaning) had negative effects, while still others (e.g. religious coping) were not associated to body image at all. Furthermore, even when religion was found to affect aspects of body image, findings regarding the specific mechanisms that mediate the relationship between religion and body image were widespread and complex. For example, religious identity, organizational religiosity and internalization of thin ideas were studied by Chaker et al. (2015), comparing Muslim women to non-Muslim women in Canada. Findings revealed that religiosity as a composite score was significantly correlated with appearance satisfaction, while organizational religiosity (i.e., involvement with a religious center such as mosque) significantly contributed to the variance in weight satisfaction. Religious identity (i.e., Muslim vs non-Muslim) did not significantly contribute to the variance in appearance or weight satisfaction, internalization of the thin ideal, and perceived pressure to adhere to media's beauty standards. Similarly, Mussap (2009) studied strength of religion faith, exposure to Western-style visual media and modesty, by comparing Muslim and non-Muslim women in Australia. Findings indicated that religious women consumed less media and were stricter about their modesty. In addition, a negative correlation between the intensity of religious belief and body dissatisfaction, body objectification and restrictive eating behaviors was found. These correlations were mediated by the degree of exposure to the media and by modesty, such that religion had an indirect positive impact on body image, through its influence on media consumption and women's modesty customs. Finally, Feinson and Hornik-Lurie (2016) compared Jewish religious groups and did not find a direct association between religion and body image.

Following the above-mentioned studies, it is clear that a systematic investigation of the relationship between religion and the mechanisms associated with it regarding body image is necessary. Moreover, as previous studies mostly focused on

the Christian samples, it is important to explore the generalizability of these findings to other religions. Thus, the present study aimed to explore this relationship in the context of Judaism in Israel. Importantly, the multi layered sub-groups of Judaism in Israel form an ideal opportunity for an extensive exploration of the possible mediating factors related to religion and body image. Israeli culture is influenced by Western values and ideals and is based on a modern, democratic and secular law system. At the same time, Israel is also a Jewish country which draws its values from the bible and the laws of religion (Fuchs 2010). The Jewish portion of people in Israel (which is the majority of the population) is comprised of three distinct groups, which vary in their levels of strictness and religious commitment within the same religion. This allows for a naturally controlled setting for the factor of religion.

Jewish Denominations in Israel

As explained above, the Jewish population in Israel can be characterized by three religious sub-groups:

Secular Jews - a majority, who do not comply with religious laws and may preserve some of the religious tradition, apart from the Jewish laws enforced by Israeli legislation (Latzer et al. 2008). Secular Jews are exposed to Israeli and foreign mass media (Feinson and Meir 2012) and therefore are indistinguishable in their dress style from their Western counterparts (Yulevitch et al. 2013).

Ultra-orthodox Jews (UO) - strictly comply with the ancient laws of religion, live in separate neighborhoods, usually do not own televisions and their use of computers is forbidden or highly limited for vocational purposes (Campbell and Golan 2011). Furthermore, the rules on female modesty within this society are meticulous and strict (Yulevitch et al. 2013).

Modern -orthodox Jews (MO) - adhere to the laws of religion and preserve most of the religious tradition. However, they are more open to modern life, and more exposed to Western media, attempting to synthesize compliance with Jewish law with the secular modern world (Seigelshifer and Hartman 2011). Segregation between the sexes is less strict and their dress-code, while adhering to some modesty laws, is less meticulous and harsh (Yulevitch et al. 2013).

In the present study, following the above mentioned literature review, we hypothesized on three mechanisms through which religious denomination can affect body image: strength of religious faith, media exposure and modesty. Notably, these all vary extensively between the three religious groups studied in this research.

Strength of Religious Faith

Refers to the level of devotion an individual has to his/her religion (Mattis and Jagers 2001). This factor is closely associated with intrinsic characteristics of religiousness (Plante et al. 1999). Religious individuals may feel less pressured to meet societal appearance and weight ideals if they feel that they are living a rewarding life, while participating in religious activities (Woofenden 2012). Focusing judgments of self-worth away from appearance, and toward moral and ritualistic pursuits, may affect one's positive body-image (Mussap 2009, p. 125). Furthermore, religion could minimize low body esteem when individuals believe that their body was made in God's image and is therefore "good" (Boyatzis et al. 2007).

Media Exposure

The sociocultural perspective on body image (Tiggemann 2011) assigns central importance to *Media exposure* as a potent exposing mean of unrealistic images of the female beauty ideal (Smolak and Thompson 2009) and a major source for the highly prevalent fascination with being thin among women (Perloff 2014). Two meta-analyses, which focused on visual media and included both correlational and experimental studies, reported a correlation between various types of media exposure and dissatisfaction of females with their bodies, internalization of the thin ideal and disordered eating, behavior and beliefs (Grabe et al. 2008). A culturally stereotyped standard of beauty that is repeatedly communicated in contemporary Western media is considered a crucial factor in the internalization of the ideal of thinness, which in turn harms body image, especially among women (Grabe et al. 2008; Levine and Chapman 2011).

Importantly, the general pattern of results attesting to media effects on body dissatisfaction, noted recently by Tiggemann (2014), has emerged from research conducted in primarily Westernized societies. Samples included mainly white participants, who share the same unrealistically thin "body perfect" ideal of female beauty (Bell and Dittmar 2011). Increasingly, however, researchers have begun exploring media effects on body images of young women from different religions and ethnic groups (e.g. Swami et al. 2014). Results have supported the premise that religious identity may act as a protective factor, buffering women from the negative effects of thin-ideal Western media images. Particularly, religious identity discourages body-centric media consumption (Mussap 2009), promoting less reliance on media messages and reducing the internalization of the thin ideal and other perceived appearance pressures of the media beauty standards (Dunkel et al. 2010; Swami et al. 2014)

Modesty

A concept that can be found across different cultures and religions, (Andrews 2011), and has been defined as "a mark of sexual purity and respectable womanhood" (Reagan 1997, p. 1780). A modest dress code is associated with lower objectification experiences (Fredrickson and Roberts 1997), i.e. allowing women's self-affirming as human beings instead of sexual objects (Holman 2012), and therefore as a buffering mechanism against cultural appearance pressures (Mussap 2009). For instance, Swami et al. (2014) found that use of the hijab among Muslim women living in the UK, was associated with lower objectification experiences, less importance on appearance, and with a more positive body image, suggesting that Western dress code and not religious affiliation per se, was associated with body image concerns. The Jewish concept of "tzniut" (modesty) in contemporary Orthodox usage, applying primarily to the responsibilities of women and girls, highlights an idealized process through which one achieves a kind of profound spiritual self-actualization, personal empowerment and cultural subversion. Moreover, the increasing discourse in recent years relating to Orthodox women's appearance is also understood as an attempt to protect the religious community from the negative effects of contemporary Western culture (Hartman 2007).

Taken together, the above presented literature review leads to the following hypotheses. Our first hypothesis (H1) was that religion denomination would buffer against body image dissatisfaction. Particularly, we hypothesized that UO women would maintain more positive attitudes regarding their bodies, and would suffer less from body image dissatisfaction than MO women, who in turn would maintain more positive attitudes regarding their bodies, and would suffer less from body image dissatisfaction than secular Jewish women. The second hypothesis (H2) was that strength of religious faith, media exposure, and modesty will mediate the effect of religious affiliation on body image satisfaction and dissatisfaction. These hypotheses were examined in a correlational study within a sample of Israeli Jewish women identifying with one of the three denominations detailed above.

Method

Participants

The sample included 483 Israeli Jewish women,¹ ages between 18 and 30 years ($M = 25.2$, $SD = 2.9$). The average body

¹ While acknowledging that males are also prone to body dissatisfaction, in the present study we focused on a female population. Previous research suggests that males demonstrate a more positive body image compared to females, and that religion in general plays a lesser role in males' lives (Christel et al. 2012). Additionally, some of our variables (e.g. modesty) are specifically relevant to the female Jewish population.

mass index of the participants (BMI: kg/m²) was 22.55 ($SD = 3.6$). Regarding religious denomination, 205 (42.4%) defined themselves as being secular, 163 (33.7%) as MO and 115 (23.8%) identified themselves as UO. Two-hundred and eighty four (58.8%) of the participants were single and 199 (41.2%) were married. Three-hundred and sixty five participants (75%) had no children and 116 (25%) had 1–6 children ($M = .5$, $SD = 1.1$). Regarding education, seventy nine (16.4%) of the women graduated high school, 324 (67.1%) were studying towards or had a BA degree or equivalent and 80 (16.6%) were studying towards or had an MA degree or higher.

Procedure

Secular and MO participants were recruited using social media networks such as Facebook, on a voluntary basis, or through the college website where they were given course credit for their participation. The participants completed the questionnaires online. Questionnaires and data output were generated using Qualtrics© 2015 (Qualtrics, Provo, UT, USA. <http://www.qualtrics.com>). UO women were recruited on a voluntary basis using a snowball-sampling technique; Potential participants were approached by the third author and then asked to forward information about the study to other individuals who might be eligible to participate. The participants completed the Qualtrics questionnaire using Email if they had internet access or using a paper questionnaire if they didn't have internet access. Data was treated in confidentiality and participants were debriefed immediately after completing the questionnaire. The study was approved by the institution's Ethics Committee (Protocol 2,016,001/01).

Measures

All measures were self-report Likert-type questionnaires. Participants were administered the Hebrew versions of the following measures. The original English questionnaires were translated using the parallel-blind technique (Behling and Law 2000) by two different researchers for the purpose of the present study.

Strength of Religious Faith (FAITH) Assessed using the 10-item Santa Clara Strength of Religious Faith Questionnaire (Plante et al. 1999). The FAITH is answered on a 4 point scale ranging from “*strongly disagree*” to “*strongly agree*”. An example item is: “My faith is an important part of who I am as a person”. The scale was calculated as the mean for the 10 items. Internal consistency of the FAITH original version was 0.94–0.96 and in the current study was found to be satisfactory (Cronbach's $\alpha = 0.97$).

Modesty of Clothing: (MODEST) A modified version of the measure employed by Mussap (2009) was used to assess modesty of dress. Participants were asked to rate the extent to which they cover various parts of their body when in public using a 5-point scale ranging from “*never*” to “*always*”. The scale score is obtained as the sum of the responses regarding 12 body parts which are relevant for religious Jewish women, including: Elbows, collarbones, knees, legs, wrist, hair, thighs, abdomen, foot, shoulder, chest cleavage, and armpit. Responses to these items were summed. Internal consistency estimates for MODEST original version was 0.88 and in the current study was found to be satisfactory (Cronbach's $\alpha = 0.91$).

Media Exposure: (MEDIA: 2 Questions) Participants estimated how much time per week they spent watching TV and how much time per week they spent on the internet (excluding educational and vocational purposes). These questions were phrased following McCreary & Saldava's (1999) suggestions, used in studies relating to eating disorders (Calado et al. 2011), and following Tiggemann and Slater (2013). Time spent watching TV was assessed on a 9-point Likert scale, ranging from “*Not at all*” to “*18 or more hours a week*”. Time spent on the internet was assessed on an 8-point Likert scale ranging from “*Not at all*” to “*6 hours or more a day*”. Media exposure scale was obtained by averaging the z-scores for the TV and internet exposure assessments.

Body Image Concern Inventory (BICI; Littleton et al. 2005) A 19-item brief self-report measure designed to assess dysmorphic appearance concerned with items related to body-dissatisfaction, checking and camouflaging behavior, social concerns and avoidance related to appearance defects. For each item on a 5-point scale (1 = *never*, to 5 = *always*) participants indicated how often they had the described feeling or performed the described behavior. A total score was computed by summing up all the items, and can vary along 19–95, with higher scores reflecting greater levels of dysmorphic concerns regarding the body. Internal consistency of the BICI in the original study was 0.93 while in the current study was found to be satisfactory (Cronbach's $\alpha = 0.91$).

The Body Appreciation Scale (BAS; Avalos et al. 2005) Measures aspects of positive body image that include acceptance of, favorable opinions toward, and respect for the body. The 13 items of this scale are rated on a 5-point scale (1 = *never*, to 5 = *always*), and are averaged to obtain a total score. Internal consistency of the BAS in the original version was 0.91–0.93 and in the current study was found to be satisfactory (Cronbach's $\alpha = 0.88$).

Background Information (11 Questions) Participants were asked for self-reported weight (kg), height (m), country of

birth, highest level of education, religious denomination, high school, age, country of birth, marital status and number of children. Body mass index (BMI) was calculated by the researchers from participants' self-reported weight and height.

Statistical Analysis

We used One-Way ANOVA in order to test for differences between religious denomination groups in the main study variables, with Tukey's correction for multiple comparisons for post hoc tests when needed. A chi-square test was used in order to compare marital status between religious denominations. We used Pearson correlation coefficients to test for correlations between them. Following this initial analysis, we constructed two path analysis models in order to test our main mediation hypothesis. We tested these models using structural equation modelling (using the Amos version 21 software). Finally, we performed multivariate regressions in order to strengthen our findings and confirm that background variables alone did not account for the differences in body image between the three study groups. All results were considered significant at .05 level.

Results

Initial Analysis

We found significant differences in marital status between all groups: Ninety UO women (78%), 70 religious women (43%) and 39 secular women (19%) were married ($\chi^2(2) = 107.0, p < .01$). Other sample demographic characteristics and the main study variables, as well as tests for group differences, are presented in Table 1. Pearson correlations between the study variables are presented in Table 2.

H1 – Group Differences

H1 was partially confirmed. We found significant differences between religious denomination groups in both positive and negative body image ($F(2,480) = 14.9$ and 8.1 , respectively, $p < .01$). However, follow-up post hoc tests showed that while UO women had significantly higher positive body image and significantly lower negative body image than secular women, MO women were not consistently different from the other groups. Specifically, MO women had significantly lower negative body image than secular women had, but did not differ from UO women. MO women also had significantly lower positive body image than UO women had, but did not significantly differ from secular women. Additionally, significant group differences were found in strength of faith, modesty and media exposure, which are consistent with group

characteristics as described earlier. Table 1 shows the means and standard deviations of the body image scales for all groups.

H2 - Mediation

Model Construction

We considered three mediating variables in the relationship between religious denomination and body image: Strength of religious faith, modesty and media exposure. Since we found a high, significant correlation between Strength of religious faith and modesty ($r = .72, p < .01$), we decided not to include modesty as a mediator in the model. Concerning the socio-demographic variables that were related to body image, we found that marital status and number of children were highly correlated ($r = .57, p < .01$) so we included only marital status in the model. Even though we found no significant differences between the religious denomination groups in BMI, we included it in the model because of its theoretical importance and its correlation with body image ($r = .23, p < .05$ and $r = -.23, p < .05$ for negative and positive body image, respectively). Finally, because of the nature of differences between groups in positive vs. negative body image that we found when testing our first hypothesis, we constructed separate path diagrams for each measure with different group assignments. The differences in positive body image were between the UO group and the other two groups, with no significant difference between secular and MO. Therefore, we coded a dummy variable for OU and it was used in the model predicting positive body image. Similarly, as secular women differed from the two other groups in negative body image, we coded a dummy variable for secular and it served to predict negative body image. We included BMI and marital status as background variables and faith and media exposure as possible mediators. In accordance with the mediation hypotheses, we included all possible paths between the religious denomination, the mediators and body image. We connected all socio-demographic variables to each other, and included paths from socio-demographic variables to the mediators and to body image if we found a significant correlation between those variables. We then modified these models by omitting insignificant paths between BMI or marital status and the endogenous study variables, but this modification did not change the conclusions regarding the mediation role strength of religious faith and media serve in the relation between religious denomination and body image.

Negative Body Image

The path diagram that we used to test the direct and indirect effects of religious denomination on negative body image is shown in Fig. 1. The direct path between marital status and

Table 1 Descriptive statistics and tests for group differences in sample demographics and main study variables

	Ultra orthodox (N= 115)			Modern orthodox (N= 163)			Secular (N= 205)			F(2,480)
	Mean	SD	Range	Mean	SD	Range	Mean	SD	Range	
Age	25.2 _a	3.0	18.0–32.0	24.3 _b	2.5	19.0–30.0	25.8 _a	3.0	18.0–32.0	13.0**
N of Children	1.6 _a	1.4	0.0–6.0	0.3 _b	0.7	0.0–3.0	0.1 _b	0.5	0.0–6.0	130.1**
BMI	22.9	3.7	17.3–36.2	22.6	3.4	14.9–35.2	22.3	3.7	16.9–41.9	0.8
Faith	3.5 _a	0.5	1.0–4.0	3.2 _b	0.5	1.0–4.0	1.6 _c	0.6	1.0–3.8	566.2**
Media	-0.6 _a	0.7	-1.5- 1.4	-0.1 _b	0.6	-1.5-2.3	0.4 _c	0.7	-1.2-2.1	71.0**
Modesty	53.4 _a	6.0	12.0–60.0	39.2 _b	7.0	12.0–56.0	26.7 _c	7.7	12.0–48.0	528.6**
BICI	37.1 _a	14.0	16.0–79.0	38.8 _a	13.5	15.0–90.0	43.3 _b	15.6	13.0–90.0	8.1**
BAS	4.1 _a	0.6	1.7–4.9	3.8 _b	0.7	1.4–4.9	3.6 _b	0.8	1.2–4.9	14.9**

Groups with similar sub-indices do not differ significantly ($p < .05$) according to Tukey’s post-hoc test for multiple comparisons. ** $p < .01$

faith was omitted from this path diagram due to lack of significance. For simplicity, we did not present in this diagram the simple correlations between BMI, Marital Status and Religious denomination, although they were included in the model. Model fit indices were the following: NFI = .997, TLI = .995, CFI = .999, RMSEA = .024, $\chi^2(2) = 2.5$, $p = .281$. We found a significant indirect path leading from religious denomination to negative body image through media (Beta = 0.045, $p = .045$). The path leading from religious denomination to negative body image through faith was not significant (Beta = 0.106, $p = .283$). In addition, the direct effect of religious denomination on negative body image was not significant (beta = -.03, $p = .595$). We thus conclude that the relationship between religious denomination and negative body image is fully mediated by media, offering partial support for H2, as can be seen in Fig. 1.

Positive Body Image

The path diagram that we used to test the direct and indirect effects of religious denomination on positive body image is shown in Fig. 2. The direct path between marital status and media was omitted from this path diagram due to lack of

significance. For simplicity, we did not present in this diagram the simple correlations between BMI, Marital Status and Religious denomination, although they were included in the model. Model fit indices were the following: NFI = .991, TLI = .966, CFI = .996, RMSEA = .046, $\chi^2(2) = 4.1$, $p = .132$. We found a significant indirect path leading from religious denomination to positive body image through media (Beta = 0.037, $p = .021$) and a significant indirect path leading from religious denomination to positive body image through faith (Beta = 0.0057, $p = .006$). The direct effect of religious denomination on positive body image was not significant (beta = -.05, $p = .234$). We thus concluded that the relationship between religious denomination and positive body image is fully mediated by both media and strength of religious faith. Accordingly, in the context of positive body image, H2 was fully supported, as can be seen in Fig. 2.

Additional Analyses

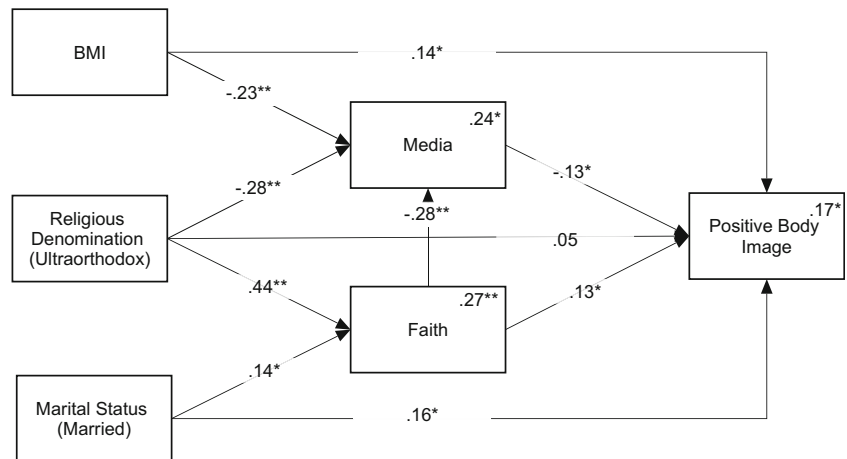
In order to ascertain that marital status and BMI did not account for the direct effect of religious denomination on body image, we conducted two regression analyses that included marital status, BMI and religion as predictors of body image

Table 2 Pearson correlation coefficients between the study variables

	2	3	4	5	6	7	8	9
1. Age	.27**	.31**	.10*	-.21**	.13**	-.08	.01	-.06
2. N of Children		.57**	.13**	.29**	-.24**	.51**	-.08	.16**
3. Marital Status ^a			.06	.33**	-.26**	.47**	-.17**	.24**
4. BMI				.00	.12**	.09*	.23**	-.23**
5. Faith					-.41**	.72**	-.21**	.26**
6. Media						-.43**	.27**	-.27**
7. Modesty							-.16**	.18**
8. BICI								-.66**
9. BAS								

^a Married = 1 * $p < .05$, ** $p < .01$

Fig. 1 Standardized path weights for predicting negative body image. Figures on top right hand side of each endogenous variable are multiple regression correlation coefficients. $*p < .05$, $**p < .01$



(negative and positive). The results of these regression models that are presented in Table 3, show that religious denomination remains significant in the presence of BMI and marital status, hence we concluded that association between religious denomination and body image is indeed mediated by media and faith and not confounded by BMI and marital status.

Discussion

The present study aimed at systematically investigating and confirming the association between different religious denominations and both positive and negative body image, as found in previous similar studies (e.g. Swami et al. 2014) and specifically in relation to Jewish religion (e.g., Handzelzalts et al. 2017). Our findings confirmed that Jewish denomination affiliation is associated with women's body image. Particularly, in agreement with our first hypothesis, UO women maintain more positive attitudes regarding their bodies, and suffer less from body image dissatisfaction than secular Jewish women. However, when examining the above association further, the differences found in both the positive and the negative body

image reveal a more complex pattern within the three study groups. Differences in positive body image were detected between the UO groups and the other two groups, with no significant difference between secular and MO. When examining negative body image, secular women differed from the two other groups with no difference between UO and MO groups. Additionally, although not all differences were significant, UO women had more positive as well as less negative body image than MO women, who had more positive body image than secular women.

This pattern of results is in agreement with the assertion that MO women represent a unique group, often forced to navigate between contradictory and competing cultural expectations, i.e. both traditional religious obligations, and mainstream cultural values (Weinberger-Litman et al. 2017). Thus, MO women share the adherence to religious rituals and faith with the UO women, while being exposed to and adopting cultural aspects of the post-industrialized societies (Seigelshifer and Hartman 2011). Taken together, these findings illustrate the importance of measuring the discrete positive and negative dimensions of body-image (Tylka 2011), as there are significant differences in body image satisfaction and

Fig. 2 Standardized path coefficients for predicting positive body image. Figures on top right hand side of each endogenous variable are multiple regression correlation coefficients. $*p < .05$, $**p < .01$

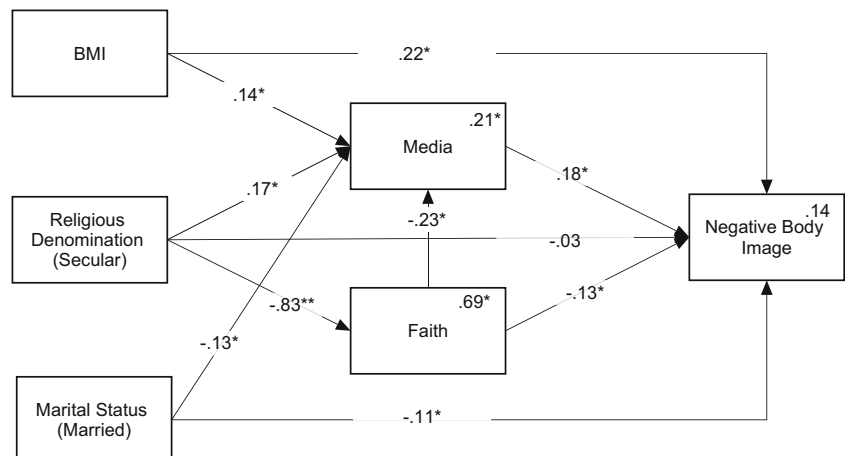


Table 3 Regression coefficients for predicting negative and positive body image by socio-demographic variables only

	Negative body image			Positive body image			
	B	SE	Beta	B	SE	Beta	
BMI	1.0	0.2	0.25**	BMI	−0.1	0.0	−0.25**
Marital status	−4.0	1.4	−0.13**	Marital status	0.3	0.1	0.19**
Secular	4.1	1.4	0.14**	Ultraorthodox	0.3	0.1	0.15**

** $p < .01$

dissatisfaction patterns related to different religious denomination groups. Furthermore, these findings are especially remarkable when noting that BMI, which has been associated with body image (Sarwer et al. 2005), did not differ between the groups. This strengthens the assertion that body image is affected by the subjective factors examined in the study rather than by the physical body itself.

Within the framework of sociocultural context (e.g., Tiggemann 2011), and following the study's second hypothesis aim, our supportive findings show that the direct association of religious denomination with body image disappeared when mediating variables, i.e., media and strength of faith, were put into the path analysis model. Specifically, the relationship between religious denomination and negative body image was fully mediated by media, while the relationship between religious denomination and positive body image was fully mediated by both media and strength of religious faith. This very important finding may shed light on the link between religion and body image (e.g., Homan and Boyatzis 2010), suggesting a possible explanation for previous inconsistent results within this limited area of research (Feinson and Hornik-Lurie 2016).

The central effect of media found in our study for both positive and negative body image follows other studies associated with body image and media in general (e.g. Grabe et al. 2008). It demonstrates the robust role media exposure has in transmitting societal standards for female beauty (i.e., the desirability of thinness) and its consequent role in shaping both body image ideals and negative body image perceptions (e.g., Perloff 2014). For example, higher screen time (TV and computer screen) was associated with less body satisfaction in a sample of adolescents (Suchert et al. 2016). Additionally, controlled exposure to the slender ideal in magazines, television, and video games generated a moderately large negative effect on women's state body satisfaction (Levine and Chapman 2011).

Importantly, in line with previous findings (e.g. Mussap 2009), the current results demonstrate a significant relationship between strength of religious faith among UO women, i.e., strong and internalized religious beliefs manifested through strong religious observance and commitment, and positive body image. Within the framework of the social-cultural model of body image (Tiggemann 2011), religion

may promote positive body image by protecting individuals from media exposure and its hazardous implications with regard to body-image, and by encouraging use of modest clothing in public² (Mussap 2009). The fact that ultra-orthodox Jews tend to isolate themselves by restricting the use of television as well as the internet (Livio and Weinblatt Tenenboim 2007), is therefore central to the understanding of their low negative as well as high positive body image. Furthermore, by focusing judgements of self-worth away from appearance and towards moral and ritualistic pursuits relevant to the individual's religion (Ferraro 1998), strong faith may offer individuals the opportunity to select and work towards meaningful goals, and may serve as a base of self-worth.

The above findings have several clinical implications for enhancing body image. First, clinicians should be aware of the complexity of body image and the various factors which are implicated in it. Following, they should carefully assess the degree of body dissatisfaction among all women, irrespective of religious beliefs and practices, and offer them materials on becoming critical viewers of media, thus rejecting unrealistic images of women in the media (e.g. Levine and Chapman 2011). Research suggests that being skeptical of media messages is associated with positive body image and can act as a buffer against negative body image outcomes (Pope et al. 2014).

Second, intervention programs could help young women establish self-defined meaningful priorities while introducing aspects of religious commitment to women, regardless of their specific faith. Namely, applying principles advocated by most religions, such as focusing on serving others, actively engaging in one's community, and on inner strength rather than on appearance, may enable one to ignore external media's influences that suggest a thin-ideal body shape (Inman et al. 2014). For instance, clinicians implementing acceptance and life's purpose have been successful with young Christian women with eating disorders (Richards et al. 2007).

² It should be noted that in our study, as strength of religious faith and modesty were highly correlated, we chose to focus on the latter, as we believe that modesty in the present sample, stems from faith (Latzer, 2003; Andrews 2011). However, in other cultures or in other contexts (e.g. Dunkel et al. 2010) modesty in itself may not solely associate with religiousness and thus should be further studied as a possible effect on body image.

The present study is not without limitations. First, participants were recruited via social network and through personal connections, using the snowball method, thus limiting the representation and generalizability of the findings. However, this method was necessary to access populations who generally shun participating in surveys or research (Feinson and Meir 2012; Livio and Weinblatt Tenenboim 2007; Rier et al. 2008). A second limitation of the study is its correlational nature. Directly exploring causation for strength of religious faith may be impossible as most people are born into their denominations and only a minority changes them. However, measuring causality in terms of media exposure and body image in different religious environments is indeed possible. Thus, our findings provide an important ‘first step’ paving the way for a longitudinal research that can track change in body dissatisfaction over time, and look at such change in the context of changing media and social media in different religions and denominations. Third, there is the issue of social desirability. It may be that as a segregated community, the religious respondents answered as they believe was expected from them and not as they really feel. Although this inclination may influence all of the respondents, social desirability with regard to values expected by religion may be even stronger (Rier et al. 2008). This may call for using measures other than self-report measures, as are commonly used in most studies in this field (Boyatzis and Quinlan 2008), or adding **impression management or implicit measures that could control for this possible effect**. Finally, we note the complexity of other mediating factors of religion and body image. Although the mediating variables in this study are theoretically justified and cover the possible confounders, while offering a good statistical fit, other mediating variables (e.g. thin-ideal internalization) should be examined in future studies.

Despite the limitations described, the study demonstrates the buffering effect of religion on women’s body image, while depicting that this entire effect is mediated by media exposure. It therefore seems that the limited media exposure forced by certain denominations shields women from the harmful sociocultural pressures, and not religion by itself. Future research is needed to clarify the specific factors that may play a role in these particular protective and risk factors. Further, studying this possible mediation effect of media, in other religions and denominations, as well as elaborating additional mechanisms, other than intrinsic religious experience, may help explain how individuals can cope with everyday pressures of meeting an unattainable ideal. Finally, while there is evidence that media exposure to cultural ideals (“muscular media”) negatively affects body image and increases depression among males (e.g., Agliata and Tantleff-Dunn 2004), the factor of religion has not been explored for this group. It is an open question whether the relationship found in the present study would generalize to males. Therefore, future studies on a parallel male population may shed important light on the matter.

Compliance with Ethical Standards

Conflict of Interest The authors declare that they have no conflict of interest.

Ethical Approval All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

Informed Consent Informed consent was obtained from all individual participants included in the study.

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