## TEMPLE OR PRISON: RELIGIOUS BELIEFS AND BODILY ATTITUDES AND EXPERIENCES

by

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# TEMPLE OR PRISON: RELIGIOUS BELIEFS AND BODILY ATTITUDES AND EXPERIENCES

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by

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#### **ABSTRACT**

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Previous research on religion and the body focused on the influence of religion on body image and behaviors. This study examines the effects of specific attitudes toward the body derived from a particular religious system, and people's experiences of their body, rather than on behaviors. Two competing attitudes about the body within Christianity are radical dualism (an objectified view of one's body) and sanctification (a view which sees the body as holy, worthy of respect, and integral to one's being). Using an online survey system and self-report measures, participants indicated the degree to which they hold sanctified and radically dualistic views about their bodies as well as how they experience their bodies. Radical dualism was found to be negatively related to body satisfaction and sexuality awareness and positively related to body shame, depersonalization, and lack of body awareness. Sanctification was found

to predict body satisfaction and internal body awareness. This study contributes to a greater understanding of how religiously-based attitudes about the body are related to experiences of the body.

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## CHAPTER 1

## REVIEW OF THE LITERATURE

### Introduction

Over the centuries, there have been two trends within Christianity regarding the body (Hall & Thoennes, 2006). The first trend is a "radical dualism" derived originally from the Gnosticism prevalent in the cultural context in which Christianity was birthed. This extreme version of dualism perceives the body and the soul as radically separate from each other and regards the material world (including the body) as inherently evil or corrupt and the spiritual world as the ideal. This Gnostic view arose out of Greek thought and was particularly influenced by Plato's separation of matter and spirit and Aristotle's notion of divine impassibility. Over time Gnostics came to view the body as unimportant and therefore either to be treated harshly (asceticism) or to be indulged with excesses (libertinism). As Hall and Thoennes (2006) pointed

out, this radically dualistic thinking has had pervasive influences in the Christian world, both in the early church and currently. Many effects of radical dualism can be seen in the popular theology of conservative segments of the Christian subculture; for example, a belief in salvation as release from the body (seeing heaven as a merely spiritual existence), elevation of bodily sins above other sins such as gossip, and discomfort with the idea that Jesus had a body (Beck, 2008).

Throughout history, this attitude of radical dualism has coexisted within Christianity with a healthier view of embodiment as a psychosomatic unity, in which the body and the soul work together, are both affected by sin, and are both redeemed and sanctified. This perspective was taught by the biblical authors (Romans 8:23, New International Version¹; 1 Corinthians 15:35-49; Berkouwer, 1962; Hoehner, 2005) and many early church fathers (Augustine, *De Trinitate*. 15.17.11, trans. 1887; Augustine, *De Johannis evangelium tractatus*, 15.19, trans. 1888; Berkouwer, 1962; Hall, 2005). Embodiment emphasizes the body as an integral part of one's personhood. For example, Hall and Thoennes (2006) articulated a theological defense for a healthy view of embodiment based on the

<sup>&</sup>lt;sup>1</sup> Unless otherwise indicated, all Scripture references are to the New International Version.

incarnation of Christ in which his incarnation demonstrated the goodness of human nature in both its spiritual and physical aspects.

Other Christian researchers share the perspective of Hall and Thoennes (2006) regarding embodiment (Clarke, 2010; Cox, 2002; Greenwood & Delgado, 2011; Malony, 1998). Malony (1998) emphasized the physical basis for spirituality and advocated for an understanding of human beings as body-soul unities. Greenwood and Delgado (2011) asserted that people were created as embodied creatures and that therefore God has a purpose for bodies. Cox (2002) cautioned against a Gnostic approach to the body and stated that the body bridges the immaterial and material dimensions of a person. One's body and soul are inextricably linked; the physical body is not evil in and of itself, but is a means for expressing the inner aspects of a person. Cox described three typical models of approaching the body: legalism (harshly controlling the body), despair over one's inability to discipline one's passions, and viewing the body as an integral part of spiritual transformation. He concluded that the final option is the only healthy and biblical model. Clarke (2010) agreed with this holistic, embodied model and argued that unity of body and soul is the way that humanity was designed. He further argued that if the body is considered

"spiritual," there are implications for mental health care; that which affects the body also affects the spirit.

In addition to these authors, who argued theoretically for a healthy view of the body based on Christian theology, a small body of research exists which examines the relationship between general experiences of the body and religiosity. Several of these studies focus on the connection between religiosity and physical health (Hill & Pargament, 2003; Masters & Knestel, 2011; Park, 2007). Park (2007) summarized existing literature that has demonstrated positive links between religion/spirituality and physical/mental health. Based on this connection between religion/spirituality and health, Park suggested that a person's religious and spiritual beliefs significantly influence attitudes and behaviors relating to the body, which then result in these positive health outcomes. Likewise, Hill and Pargament (2003) looked at existing literature regarding religiosity and health and considered several particular areas within the study of religion that contribute to health. They reported links from previous research between perceived closeness to God and lower depression, higher selfesteem, and better psychological adjustment after a transplant surgery and or illness. They also reported that religion and spirituality may serve as an

overarching, orienting system for people, providing coping strategies and a sense of meaning and purpose in the face of life stressors.

Masters and Knestel (2011) also looked at links between religious orientation and health, using the intrinsic/extrinsic orientation distinction first developed by Allport and Ross (1967). Allport and Ross defined extrinsic religiosity as using religion for social or status reasons and intrinsic religiosity as finding one's ultimate meaning and significance through religion. Surveying a community sample of 157 participants ages 18-87, Masters and Knestel found that individuals with a more intrinsic religious orientation were significantly more likely to rate their health positively than extrinsically oriented participants. Additionally, individuals with an intrinsic religious orientation had the most beneficial overall health profile and were less likely than extrinsically motivated participants to engage in behaviors such as smoking or excessively drinking alcohol.

Other studies that looked specifically at the body and religion focused on body image and eating disorders or weight concerns (Boyatzis, Kline, & Backof, 2007; Boyatzis & McConnell, 2006; Boyatzis & Quinlan, 2008; Boyatzis, Trevino, Manning, & Quinlan, 2006; Cottingham, 2008; Jacobs-Pilipski, Winzelbert, Wilfey, Bryson, & Taylor, 2005; Joughin, Crisp, Halek, & Humphrey, 1992; Kim,

2006, 2007; Smith, Richards, & Maglio, 2004; Zhang, 2012). The studies addressing body image will be reviewed in greater detail in a later section; however, they consistently found an overall positive relationship between the ways in which women cope with body image concerns and the strength of their spiritual and religious beliefs (Boyatzis et al., 2007; Boyatzis et al., 2006; Jacobs-Pilipski et al., 2005; Kim, 2006).

One study (Smith et al., 2004) examined links between disordered eating and religious orientation. Two groups of female participants were surveyed; one group consisted of 129 female, primarily Caucasian, undergraduate students (average age = 19) at a small Midwestern university. The second sample consisted of 316 primarily Caucasian females (average age = 21) who were beginning inpatient treatment for eating disorders in a private treatment facility. Both groups of participants were asked to respond to measures of eating attitudes and religious orientation. Smith et al. found a relationship between extrinsic religiosity and a higher number of disordered eating symptoms. However, among participants with a more intrinsic religious orientation, religiosity was not linked to disordered eating.

Joughin et al. (1992) surveyed 584 members of the Eating Disorders

Association (EDA), an organization in the United Kingdom which offers support

for people who struggle with eating disorders. All participants were under the age of 30 and self-identified as either belonging to a particular church tradition, such as Catholic or Anglican, or as having no religion. Religious conversion was found to serve a protective function against weight loss, with participants who had converted to a particular church tradition reporting higher body mass index (BMI) levels than those who had not converted. A weakness of this study is that the results of participants with eating disorders were not compared with those of a control group. Furthermore, religiosity was only measured by whether or not participants self-identified as part of a church tradition. Thus, no information was gathered regarding particular belief systems or religious practices of participants, nor about their level of religious commitment or any other potentially relevant aspect of their religiosity.

Boyatzis and McConnell (2006) indicated that some facets of religion such as an appreciation for doubts and existential questions may have a negative relationship to body image satisfaction and eating behavior among young women. The researchers gathered information from 151 women, including freshman and sophomores in college (average age = 18.6), juniors and seniors in college (average age = 20.88), and alumni (average age = 25.3) from a private university, a majority of whom were White and Christian. They found that

body-image concerns and disordered eating were related to existential questions and self-doubt. In particular, among women who were freshman or sophomores in college, levels of existential questions and doubts were significantly linked to higher levels of bulimia and body dissatisfaction; these results were not found among juniors, seniors, and recent graduates. The authors suggested that the experience of questioning and doubting during the first two years of college may exacerbate young women's vulnerability to body image concerns and disordered eating.

Another study (Cottingham, 2008) surveyed 161 undergraduate women between the ages of 18 and 25 and found that those who reported more disordered eating patterns also reported feeling less of a sense of purpose in their lives in relation to spirituality. Cottingham suggested that a sense of purpose in life may be an important dimension of spirituality associated with disordered eating.

In addition to these studies on body image, eating disorders, and religiosity, Hoverd and Sibley (2007) showed that even beyond the Christian subculture, in the population at large there appears to be a strong implicit association between morality and the condition of the body. The researchers surveyed 138 individuals in New Zealand (70 males; average age = 29.85).

Participants were asked to give their general evaluation of four behaviors: dieting, overeating, exercising regularly, and not exercising. People consistently rated health-conscious behaviors such as dieting and exercising as more "pious" and less "sinful" than negative behaviors such as overeating or not exercising. Hoverd and Sibley suggested that people implicitly evaluate the condition of their bodies using moral discourse, further suggesting a link between religious beliefs and bodily experiences, given that moral belief systems are often grounded in religion.

The goal of the present study is to explore the relationship of radical dualism and sanctification to experiences of the body including body satisfaction, body objectification, body guilt and shame, depersonalization, somatization, awareness of bodily sensations, sexuality, emotion regulation, and body agency. The following two sections will first examine existing studies regarding attitudes of radical dualism and embodiment. Further existing literature evaluating links between religion and specific experiences of the body will then be summarized.

#### Radical Dualism

Although the studies outlined above have examined religion and spirituality in general, few studies have looked at specific attitudes within a

religious system in relation to the body (Mahoney et al., 2005; Murray-Swank, Pargament, & Mahoney, 2005). Empirical research looking explicitly at radically dualistic beliefs and the body is currently limited and tends to be rather specific in nature (e.g., Beck, 2008; Beck, 2009). For example, one study asked 228 undergraduate participants (64% female; average age = 19.24) to imagine Jesus experiencing different scenarios involving physical vulnerability, bodily fluids, body flaws, and hygiene, and to rank how they felt about each (Beck, 2008). The results showed that participants who held more existentially defensive faith systems (i.e., believed their faith would keep them from experiencing pain and misfortune in life) were uncomfortable with various scenarios relating to Jesus' humanity. This study demonstrated that this specific way of experiencing religiosity was related to different attitudes toward the body.

Another study about profanity explored the idea of Gnosticism in relation to death anxiety and sexuality (Beck, 2009). Participants were 266 undergraduates (59% female) from a Christian university. All participants were asked to complete measures of disgust toward animal reminders of mortality, death anxiety, defensive theology, orthodoxy, and offense at profanity. Higher death anxiety and greater disgust toward animal reminders of mortality were found to be positively correlated with higher offense at profanity such as the

words *piss*, *shit*, and *fuck*. This study suggested that if suspicion of the body is rooted in death anxiety, then "profane" references to bodily functions (urine, feces, and sex) might be offensive to Christians with more radically dualistic views. To date, no studies have examined the relationship between radically dualistic attitudes, and experiences of a person's own body.

## Sanctification and Embodiment

The psychological construct of sanctification, first articulated by Pargament and Mahoney (2005), consists of the view that one's body is perceived as having spiritual significance and meaning (Mahoney et al., 2005). Sanctification seems to capture the perspective of embodiment that has also been represented in Christian theology. Pargament and Mahoney (2005) set forth the view that sacred matters are woven into the fabric of life experience and sacred phenomena are central to the meaning of religion and spirituality. They define sanctification as perceiving something as having a divine significance and character. Sanctification may be theistic in nature (seeing something as a manifestation of one's images, beliefs, or experiences of God) or non-theistic in nature (something is imbued with value, purpose, or transcendence). Sacred things are likely to elicit "spiritual emotions" (Pargament & Mahoney, 2005) such as love, adoration, fear, and awe. When people sanctify something, they tend to

invest time and energy in it, as well as try to protect and preserve it. People may sanctify anything in their lives including their jobs, marriages, hobbies, the environment, sexuality, or their bodies (Hall, Oates, Anderson, & Willingham, 2012; Mahoney et al., 2005; Mahoney et al., 1999; Murray-Swank et al., 2005; Pargament & Mahoney, 2005; Tarakeshwar, Swank, Pargament, & Mahoney, 2001).

One study in particular focused on the connection between sanctification of the body and health-related behaviors (Mahoney et al., 2005). Researchers surveyed 289 students (77.5% female; average age = 19.2) from a state university in the Midwest. Participants were asked to complete measures that assessed the extent to which they both sanctified their bodies and saw their bodies as manifestations of God. Mahoney et al. found that greater sanctification was linked to a broad range of health-protective behaviors such as wearing a seat belt, eating well, getting enough sleep, and exercising. Sanctification was also linked to disapproval of and lower engagement in behaviors such as drinking, taking drugs, and maladaptive eating habits. Importantly, both theistic and nontheistic sanctification were significantly related to a greater sense of satisfaction with one's physical appearance and body composition. The authors noted that this may be due in part to various Christian "embodiment" teachings

which encourage people to view their bodies as worthy and acceptable in God's eyes.

## Religion and Particular Views of the Body

One strength of the sanctification and radical dualism constructs is that they allow for a more nuanced understanding of the influence of religion on different aspects of life than many of the religious concepts commonly used in research. Mahoney et al. (1999) argued persuasively that proximal concepts and measures of religion are superior to distal concepts in understanding the influence of religion on areas of human functioning. Much research on religion involves only global indicators of religiousness (e.g., single items on religious affiliation); other research uses more sophisticated constructs, but does not directly address the relationship between religion and the human functioning domain under study (e.g., intrinsic religiosity, religious commitment). Sanctification and radical dualism are proximal constructs, in that they can be used to directly address the religious aspects of a variety of domains of life. The usefulness of proximal concepts has been demonstrated empirically, with several studies showing that sanctification in particular contributes variance to outcome measures, above and beyond the variance accounted for by distal constructs, using measures such as frequency of church attendance, frequency of prayer,

self-rated religiosity, self-rated spirituality, and religious commitment (Hall et al., 2012; Mahoney et al., 1999; Tarakeshwar et al., 2001).

This distinction between distal and proximal ways of viewing religion is of particular importance in understanding the influence of religion on people's experiences of their body. The existence of theological attitudes that view the body as radically separate from the soul and as sinful, along with views that emphasize the importance of psychosomatic unity, suggest that distal concepts of religiosity may have varied results with respect to bodily experiences. As discussed later in the paper, some research has found negative relationships between aspects of religiosity and experiences of the body (Boyatzis, Baranik, Pietrocarlo, Walsh, & Zuluaga, 2003, as cited in Boyatzis et al., 2006; Boyatzis & McConnell, 2006; Kim, 2006, 2007). In contrast, the proximal constructs of sanctification and radical dualism are able to assess directly the ways in which people attribute sacred or negative, radically dualistic qualities to their bodies.

## **Experiences of the Body**

As noted above, individuals vary in the attitudes they have toward their bodies, reflecting both radically dualistic attitudes toward the body and sanctification of the body. Studies also show that individuals experience their bodies very differently from one another (e.g., Biby, 1998; Haven, 2009; Longo &

Haggard, 2012; Mahoney et al., 2005; McKinley & Hyde, 1996; Mendelson, Mendelson, & White, 2001; Miller, Murphy, & Buss; 1981; Price & Thompson, 2007). Phenomenological and perceptual constructs of bodily experience that have been researched include: (a) body satisfaction; (b) body objectification; (c) body guilt and shame; (d) depersonalization; (e) somatization; (f) internal awareness of bodily sensations; (g) sexuality; (h) emotion awareness; and (i) body agency. Current research lacks clear definitions of both perceptions of the body and experiences of the body; however, Calogero and Tylka (2010) provide a helpful distinction between the two in stating that perceptions of the body emerge from and are impacted by bodily experience. Of the constructs in this study, body satisfaction, objectification, and body shame and guilt are perceptual in nature, while depersonalization, somatization, sensation awareness, sexuality, emotion awareness, and body agency represent experiences of the body. Each of the constructs listed above has been the focus of extensive research; however, research linking these constructs to religious experience has been much more limited and will be discussed in the following sections.

**Body satisfaction.** Researchers have studied links between religion and body satisfaction, that is, how people evaluate their bodies and how they imagine that others evaluate them (Boyatzis et al., 2007; Homan & Boyatzis, 2009;

Jacobs-Pilipski et al., 2005). In general, as discussed earlier, lower body image concerns have been linked to global religiosity (Mahoney et al., 2005) and intrinsic orientation (Smith et al., 2004).

Jacobs-Pilipski et al. (2005) surveyed 255 female students (60% Caucasian) between the ages of 18 and 30 from two public and two private West Coast universities, via an Internet eating disorder prevention study. Participants rated their eating disorder attitudes, weight concerns, coping strategies, and spiritual and religious beliefs, and were then classified into two groups based on their self-rated importance of religion and spirituality. The researchers found that women who reported strong religious beliefs and practices were significantly more likely to read religious works, pray, and meditate to cope with body image distress. They also found that women with strong religious beliefs reported relying on prayer and their religious beliefs to cope with feelings of dissatisfaction regarding their bodies. Participants who prayed about their body image distress reported feeling that their prayers were effective. Additionally, women with strong religious and spiritual beliefs were significantly less likely to use distraction to cope with body image concerns. Women who reported lower levels of religiosity were more likely to use distraction as a coping mechanism in response to body image concerns. The authors suggested that spiritual and

religious beliefs and practices may be an underappreciated resource that could help young women to cope with body image concerns.

Homan and Boyatzis (2009) found significant links between religiosity and body satisfaction within a population of older adults. One hundred twentyseven participants (87 women; average age = 74.3), recruited from health clubs and churches in a rural area were asked to rate their body satisfaction, the extent to which they sanctified their bodies, and their religious orientation. For men, religious well-being, existential well-being, and believing that their bodies were a manifestation of God each contributed uniquely to their body satisfaction. For women, church attendance, intrinsic religious orientation, and existential well being were correlated with body satisfaction; however, only existential wellbeing uniquely predicted body satisfaction. The researchers suggested that a sense of meaning and purpose in life (often provided by religion) is a crucial part of feeling good about one's physical self. Particularly for women, certain aspects of religion such as internalizing one's faith and enjoying a close relationship with God may act to help buffer the distress of one's body changing with age. A notable strength of this study is that it surveyed older adults of both genders, rather than only female, college-aged students which have typically been surveyed in studies that look at experiences of religiosity and body satisfaction.

Boyatzis et al. (2007) used a pretest and posttest design to investigate the relationship between religious messages about the body and body esteem. The researchers asked 125 undergraduate women, primarily freshmen and sophomores, to report their height and weight as well as their religious affiliation. All participants completed a first pretest session, in which they completed measures of body esteem. In the second session, a control group read statements unrelated to body image or spiritual issues, while two other groups read body-affirming messages. One group read explicitly religious messages, mentioning God or referencing biblical passages (e.g., "Because I am a child of God, I am perfect and whole and my body is perfect and whole"), and the other group read spiritual messages (e.g. "The spirit of life is expressed in my body—I treat it with reverence and respect"). All three groups then viewed pictures of thin models and were asked to complete posttest body esteem measures.

The researchers found that women in the groups who read the affirming, religious and spiritual messages about their bodies reported experiencing higher body esteem and feeling better about their appearance than those in the control group. The women reading the explicitly theistic affirmations reported the highest levels of body esteem of all three groups. The authors suggested that consistent with previous research (Mahoney et al., 2005), providing women with

an immediate lens of sanctification through which to view their bodies may have enhanced participants' body image.

One study (Hayman et al., 2007) examined links between spirituality, body image, and stress in both genders. Participants were 433 college students (128 female; average age = 18.17) and were asked to report on their faith maturity, self-esteem, number of daily hassles such as peer pressure and transportation issues, and body image. For men, spirituality was negatively related to body surveillance, which suggests that the more spiritual a man is, the less he may be concerned with monitoring his body image. Surprisingly, for women, body image and spirituality were not significantly related. A strength of this study is that it included both men and women in its exploration of religiosity and body image; however, it did not explore specific religious beliefs or attitudes in relation to body experiences.

Kim (2006) further explored connections between aspects of religiosity and body satisfaction. She sampled 546 religious (Protestant, Catholic, and "other") and non-religious people (defined as people who self-reported no religious preference, atheists, or agnostics). Sixty-four percent of participants were female (average age = 44 for women; average age = 42 for men) and the majority were White. Kim measured religious practice, religious application,

religious commitment, religious identity, and religious coping, along with body dissatisfaction, dieting, and body weight. She found that for women, religious commitment, prayer, and positive religious coping were related to greater body satisfaction. For men, a closer relationship with God and positive religious coping were positively related to body satisfaction. Regardless of participants' gender, use of negative religious coping, such as questioning God's presence during a time of distress, was related to decreased body satisfaction. Kim elaborated that negative religious coping is connected to a person's doubts about the character and nature of God. She suggested that questioning who God is might in turn lead to self-doubt, which could negatively impact one's body satisfaction. Notably, Kim suggested that it is important for both researchers and practitioners to realize the complexity and importance of understanding a person's religiosity, particularly as it relates to body satisfaction.

In another study, Kim (2007) examined links between religiosity, weight perception, and weight control behaviors. She analyzed data from the National Survey of Midlife Development in the United States (MIDUS). Participants were 1,471 men (average age = 45) and 1,561 women (average age = 45) between the ages of 25 and 74; 75% of participants were White. Kim assessed religious denomination, attendance, application, social support, and identity, as well as

weight perception and weight control behaviors such as dieting or exercising in order to lose weight. Women who reported greater religious commitment and men who reported greater religious application than their counterparts were more likely to underestimate, rather than overestimate, their body weight. Kim emphasized the multi-dimensional aspects of religiosity and urged mental health practitioners to explore the complexity of a client's religious beliefs and how they may influence body satisfaction. In particular, she noted that promoting aspects of religious beliefs that are beneficial to the client, while deemphasizing aspects of religion that may be harmful, is an important part of working with religiously-oriented clients.

Zhang (2012) conducted qualitative interviews with 124 college students in Singapore and other countries (average age = 20). A majority of participants were Chinese, with the remaining participants self-identifying as Indian, Malay, or Eurasian. Participants were interviewed about their spirituality and body image. Four primary domains emerged: (a) religious/spiritual values and body image; (b) sense of self and body image; (c) interpersonal relationships and body image; and (d) relationship with the world/community and body image. Zhang found that while all participants reported some body dissatisfaction, those who identified as "spiritual" reported less body dissatisfaction than those who

identified as not spiritual. Religion and spirituality also appeared to serve a protective factor in participants' behaviors; spiritual participants were less likely to engage in behaviors such as extended fasting or using medications to lose weight. A majority of participants reported feeling societal pressure regarding their appearance. Participants reported feeling increased body satisfaction when surrounded by a loving community of friends and family. The author suggested that time and space for intentional spiritual reflection related to body image be built in to the lives of college-age women, elaborating that either individual or group opportunities provide a space for women to reflect on questions of meaning and purpose, as well as what they believe and how they live.

Body objectification. Body objectification refers to viewing one's body as an outside observer rather than as an integral part of oneself (Fredrickson & Roberts, 1997; McKinley & Hyde, 1996). Self-objectification is shaped in part by one's experience of being objectified by others over time and by gradually internalizing a sense of one's body as an object (Fredrickson & Roberts, 1997). Fredrickson and Roberts (1997) argued theoretically that experiences of being socially and sexually objectified may contribute to women experiencing shame, anxiety, depression, disordered eating, and lower sexual satisfaction. Pervasive, consistent experiences of being objectified in the culture at large, as well as

particular instances of objectification, may result in women feeling helpless and passive in relation to their bodies. McKinley and Hyde (1996) coined the phrase *objectified body consciousness* to refer to both the experience of one's body as an object and the beliefs that support this experience. A large body of empirical research has documented negative outcomes associated with greater body objectification, including disordered eating and lower body esteem (Calogero, 2011; Calogero & Pina, 2011; Frank, 2003; McKinley & Hyde, 1996; Noll & Fredrickson, 1998; Thompson, Dinnel, & Dill, 2003).

Little research has looked explicitly at links between religion and body objectification. One study (Davis-Quirarte, 2009) surveyed 161 women between the ages of 18 and 25, recruited from local community colleges. For women, finding comfort in religion or spirituality and longing for the transcendent was associated with lower self-objectification. Likewise, finding comfort in religion and spirituality and longing for the transcendent were linked to lower body image dissatisfaction for women.

**Body guilt and shame.** Studies have suggested that body objectification is related to experiences of both shame and guilt about one's body, which may develop in response to the aesthetic evaluations of one's body by others (Calogero & Pina, 2011; Fredrickson & Roberts, 1997; Noll & Fredrickson, 1998;

Thompson et al., 2003). Calogero and Pina (2011) defined body shame as appraising one's body as bad or inadequate, resulting in a desire to escape or hide from others. Body guilt involves taking reparative action, such as dieting, in response to a body-related transgression that is accompanied by feelings of regret or remorse (Calogero & Pina, 2011; Thompson et al., 2003). As one's body shame and guilt increase, one will likely become increasingly sensitive to others' evaluations, resulting in a sense of physical inadequacy and perpetuating a cycle of shame and guilt (Thompson et al., 2003).

Calogero and Pina (2011) surveyed 85 women attending a southeastern British university (80.4% White; average age = 21.89). They found that self-objectification was significantly related to body guilt; in other words, women who objectified their bodies were more likely to take action to "fix" a perceived transgression regarding their bodies. In particular, women who were "primed" with words relating to body objectification (*sexiness, weight, slender, thinness*) reported more body guilt, higher self-surveillance, and higher body shame than women in body empowerment or neutral conditions. The researchers noted that women reported higher levels of body guilt in situations where they were told they should look a certain way, such as when reading beauty tips in a magazine.

Consistent with other research (McKinley & Hyde, 1996), both body guilt and shame predicted eating restraint for women.

Noll and Fredrickson (1998) looked at links between self-objectification, body shame, and disordered eating. Surveying 204 undergraduate women (average age = 18.55), Noll and Fredrickson asked them to respond to measures of bulimic symptoms, eating attitudes, eating restraint, self-objectification, and body shame. They found that body shame significantly mediated the relationship between self-objectification and disordered eating. They thus suggested that women who objectify their bodies may resort to disordered eating in an attempt to avoid feelings of body shame.

Thompson et al. (2003) looked at body guilt and shame among men and women, using 153 undergraduate students ranging in age from 17 to 48 (66 men; average age = 21.26). They found that regardless of gender, body guilt and shame were correlated with social physique anxiety, which they defined as anxiety experienced by people in regard to other people's evaluations of their physique. Women reported significantly higher body guilt and body shame than men.

To date, only one study has examined potential links between religion or spirituality, and body guilt or shame. Boisvert and Harrell (2012) surveyed 603

adult men (86% White; average age = 42 years) from Canada about their levels of body shame, religiosity, spirituality, and eating disorder symptomatology. They found that body shame was linked to lower levels of spirituality; body shame was not related to religiosity. Notably, the authors suggested that constructs of body shame and spirituality should be studied further as mediating or moderating variables of eating disorder symptomatology. A significant weakness of this study is the limited number and type of items assessing religiosity and spirituality. The authors operationalized religiosity using only one item, "I would describe myself as religious." Additionally, they assessed spirituality using two general items: "I feel very fulfilled and satisfied with my life," and "I feel that life is a positive experience." While capturing general existential well-being, these items fail to address participants' specific religious and spiritual beliefs. No research currently exists examining more specific links between body shame and religious attitudes or beliefs.

**Depersonalization.** Another way of experiencing one's body is dissociation from one's body, or depersonalization. Depersonalization has been researched in relation to the consequences of trauma, in an attempt to emphasize the connection between mind and body (Haven, 2009; Price & Thompson, 2007). Even among people who have not experienced significant physical trauma,

depersonalization is a common phenomenon within the general population, especially among young, female students (Hunter, Sierra, & David, 2004).

In their systematic review of existing literature, Hunter et al. (2004) explained that depersonalization occurs on a continuum, from a momentary disconnection from one's body to a severe, debilitating disorder that may last for years. According to their meta-analysis, the frequency of experiencing fleeting symptoms of depersonalization over the course of a person's lifetime range from 26% to 74% in the general population, indicating that it is a fairly common occurrence. Prevalence rates in community samples showed that between 1.2% and 1.7% of people in a UK sample and 2.4% of people in a Canadian sample experienced depersonalization symptoms for a month or more. The authors stated that given the relatively common occurrence of depersonalization within the general community as well as the distress caused by these experiences, there is a dearth of high-quality research to help elaborate on these findings.

Young and Whitty (2010) suggest that the experience of dissociation from the body takes place against a background of normative, embodied existence.

When a person is dissociated from his or her body, there is still a sense that it is his or her body. Young and Whitty argued that there is a fundamental, affective component to embodiment, a sense of ownership or "mineness."

Carrying this idea further, it seems that people who value their bodies and invest time and energy into caring for them would experience depersonalization less often than those who do not. Price and Thompson (2007) surveyed 291 undergraduate students (162 women; average age = 20) and found that connection to one's body was positively correlated with reduction of overall body dissociation over time. Valuing and caring for one's body requires consistent, regular attention, which suggests a lower frequency of feeling disconnected from one's body. In contrast, adhering to religiously-based negative attitudes toward the body, which accentuate the separation of the soul from the body, might over time result in a greater phenomenological experience of separation from the body. To date, research on depersonalization and religion has focused almost exclusively on burnout symptoms in clergy members (e.g., Chandler, 2009; Doolittle, 2007; Evers & Tomic, 2003; Miner, 2007; Randall, 2007); no research exists regarding links between attitudes within religious systems and depersonalization.

**Somatization.** Somatization is defined as experiencing unexplained physical ailments in response to psychological and emotional stress (Rodin, 1984). In general, previous research has focused primarily on the relationship of somatization to somatoform disorders, so more research is needed regarding

somatization in non-psychiatric patients (Hiller, Rief, & Brahler, 2006; Rodin, 1984; Terluin et al., 2006). One study (Biby, 1998) surveyed 78 female and 24 male undergraduate students and found that somatization was significantly negatively correlated with body esteem. Somatization was also found to be linked to higher levels of depression and obsessive-compulsive tendencies.

Currently little research exists exploring the relationship of religion to somatization (Lesniack, Rudman, Rector, & Elkin, 2006; Lonczak, Clifasefi, Marlatt, Blume, & Donovan, 2006; McConnell, Pargament, Ellison, & Flannelly, 2006). Two studies found inverse relationships between somatization and organizational religiosity among African-American teenagers and people incarcerated in a correctional facility (Lesniack et al., 2006; Lonczak et al., 2006). However, because both of these studies surveyed a limited population, more research is needed regarding the relationship between religion and somatization within the general population.

One study by McConnell et al. (2006) found that somatization was positively associated with "spiritual struggles," defined as conflict, questions, and doubts related to one's faith or relationship to God. Archival data from the Spirituality and Health 2004 National Study was used. In this study of people throughout the United States, 1,629 participants (50.1% male; average age = 49.1

years) were surveyed on the following dimensions of religiosity: religious affiliation, frequency of attendance at religious services, frequency of private prayer, and self-rated religiosity. Participants were also asked about social support, spiritual struggles, and various health questions including a measure of somatization. Based on their findings, McConnell et al. (2006) suggested that religious questions, doubts, and conflicts may have physical effects as well as emotional effects such as anxiety and depression. A strength of this study is that it used measures involving explicitly theistic language (e.g. items such as, "I wondered whether God had abandoned me") and therefore contributes to a greater understanding of particular religious and spiritual beliefs that are related to one's bodily experience. The authors suggested that further exploration of people's spiritual struggles and beliefs is an important dimension of understanding their overall physical and psychological well-being.

Internal body awareness. Another important way of experiencing one's body relates to one's awareness of internal bodily sensations such as hunger, stress, and fatigue. Price and Thompson (2007) emphasized the importance of the mind-body connection when looking at a person's awareness of bodily sensations. They surveyed 291 undergraduate students (162 women; average age = 20) using a measure of body awareness assessing awareness of body

sensations such as regularity of breathing, tension when upset or nervous, emotional responses to being touched, and overall cues from one's body. Price and Thompson found that attendance to and reflection on one's inner body awareness was correlated with lower body dissociation; no gender or age differences were found.

In general, body awareness is a key focus of mindfulness-based interventions which emphasize awareness and acceptance of one's body (Holland, 2004; Langmuir, Kirsh, & Classen, 2012). Likewise, Holland (2004) asserts that mindfulness facilitates greater self-awareness, specifically in the area of one's sensations and bodily processes. A focus on mindfulness is beyond the scope of this study, but its connection to and focus on internal body awareness is worth noting.

For the purposes of this study, it may be that people who sanctify their bodies are also more aware of their internal bodily sensations because they invest time in their bodies and view their bodies as worthy of care and respect.

Attending to sensations of thirst, hunger, and fatigue requires regularly monitoring one's body and being attentive to internal cues, actions consistent with a sanctified view of the body, while seeing the body as sinful and in need of subjugation might lead to attempts to decrease attentiveness to bodily cues. To

date, however, no studies have examined the link between religious attitudes and awareness of bodily sensations.

Sexuality. While religion may be a key factor in understanding the meaning people attribute to sexuality (Freitas, 2008; Yarhouse, 2005), few studies have examined the connection between attitudes about the body within Christianity and one's experience of sexuality (Horn, Piedmont, Fialkowski, Wicks, & Hunt, 2005; Murray-Swank et al., 2005). Whereas empirical studies have supported the idea that religiousness inhibits the expression of sexuality outside of marriage (Baier & Wampler, 2008; Daniluk, 1993; Davidson, Darling, & Norton, 1995; Paul, Fitzjohn, Eberart-Phillips, Herbison, & Dickson, 2000; Regenerus, 2007; Schultz, Bohrnstedt, Borgatta, & Evans, 1977), these studies have generally failed to address how religious variables relate to an individual's sexual experience of his or her own body, as opposed to sexual behaviors.

In an unpublished master's thesis, Jacobson (2011) found links between sanctification, sexual activity, and sexual consciousness among religious participants. Participants were 187 undergraduates (77% female; average age = 18.6) recruited from a Christian college. Women who reported being sexually active also reported higher levels of sexual consciousness than women who were not sexually active. Sanctification was found to be linked to lower sexual

consciousness for the entire sample. This finding may in part be explained because the participants in this study were college students at a religious institution where sexual behavior outside of marriage is prohibited; it is possible that they may have been reluctant to be honest about their sexual awareness in relation to how they experience their bodies. This possibility was partially supported by the observation that 18% of all participants chose not to respond to any items on the measures of sexuality awareness. It is also worth noting that none of the men reported being currently sexually active. Another possibility is that religion, in addition to inhibiting sexual behavior outside of marriage, inhibits a focus on sexual feelings. Christian teachings, for example, prohibit "lusting after a woman" (Proverbs 6:25; Colossians 3:5). Stimuli which might result in increased sexual arousal may be avoided by individuals who sanctify their bodies.

Within the Judeo-Christian tradition sexuality has typically been considered to be a holistic experience involving both the body and the soul, though little empirical research exists regarding this view (Murray-Swank et al., 2005). One study by Murray-Swank et al. (2005) assessed links between religious attitudes and sexual behavior among 151 (67% female; mean age = 19), primarily Caucasian, single, undergraduate students from a state university. Participants

were asked to report on how much they sanctified sexual intercourse, as well as their religiousness, attitudes toward premarital sexuality, sexual history, and affective reactions to sexual intercourse. The researchers found that people who held a sanctified view of sex also reported more positive affective reactions about intercourse, a higher frequency of engaging in intercourse, and higher satisfaction with their sexual relationships in general. Participants who sanctified sex reported greater frequency of previous sexual behavior and higher numbers of prior sexual partners than participants who reported sanctifying sex less. However, global religiousness, measured by items such as praying and attending church, was significantly negatively correlated with sexual activity, and the two measures of sanctification of sexuality were not significantly correlated with the measure of religiousness. The researchers suggested that a possible explanation for this finding is that it may represent varying views of sexuality within religious circles. Some religious people may hold more radically dualistic views of sexuality, which may account for the negative correlation between religiousness and sexual activity. Additionally, Murray-Swank et al. demonstrated that sanctification is a distinct construct from approval of premarital sex and instead stated that sanctification may be linked to positive attitudes about sexuality in the context of loving relationships, whether married

or not. Finally, they suggested that a more nuanced, specific exploration of religious attitudes regarding sexuality could contribute to further understanding people's sexual functioning.

Another study by Hernandez, Mahoney, and Pargament (2011) found links between the sanctification of sexuality and sexual and marital satisfaction. Hernandez et al. surveyed 83 newly married individuals from the Midwest (61% women; mean age = 31) using measures of sanctification of sexuality in marriage, frequency of sexual intercourse, sexual satisfaction, sexual intimacy, marital satisfaction, and spiritual intimacy, meaning self-disclosure about one's faith to one's partner. They found that greater sanctification of sexuality was correlated with greater sexual satisfaction, sexual intimacy, marital satisfaction, and spiritual intimacy, above and beyond participants' global religiousness. In contrast to previous research (Murray-Swank et al., 2005), greater sanctification of sexuality was unrelated to frequency of sexual intercourse; the authors hypothesized that this may in part be explained by the newlywed status of the married couples, a time which is often regarded as idyllic sexually. Hernandez et al. suggested that their findings may help inform psycho-education and interventions that promote healthy sexuality.

As noted above, studies looking at sexuality have tended to focus on people's sexual behaviors rather than experiences of their sexuality. However, one study looked at people's experience of their bodies in relation to sexual activity (Weinburg & Williams, 2010). Weinberg and Williams (2010) found that comfort with one's nude body was related to a more expansive perspective on sexual activity. Weinberg and Williams surveyed 69 women and 52 men (65% White; mean age = 20.7) from a large Midwestern state university. Participants were asked about their comfort being nude in a variety of settings, the types of sexual acts they engaged in and their feelings about them, how they felt in general about being nude in the presence of others, and whether or not how they felt about being nude affected their sexual preferences. For women, being more comfortable with being nude was related to a more expansive perspective on sexuality, as well as an increased perception of intimacy with a sexual partner. For men, greater comfort with being nude was related to a positive evaluation of a variety of sexual practices; few men expressed that they feel any concerns about their body during sexual activity. Additionally, some men and women were able to experience their nude embodiment in a way that allowed sexual pleasure, rather than being hindered by body image concerns. Although this study focused primarily on sexual behavior, it suggests that one's experience of

being a sexual, embodied person has important implications for sexual intimacy, particularly for women.

It seems that a sanctified view of the body most closely captures this integrated embodiment and is consistent with increased awareness of one's sexuality, rather than experiencing sexual behaviors as a disintegrated aspect of one's self.

**Emotion awareness.** Awareness of emotions and communicating those emotions through the body is one way in which people experience their existence as embodied beings (App, McIntosh, Reed, & Hertenstein, 2011; Beukeboom & DeJong, 2008; Hall & Thoennes, 2006). Hall and Thoennes (2006) explicitly articulate the importance of emotions in relating to others and the world, asserting that cultivating emotional fluency can be an important step in indwelling all aspects of our embodiment. Emotional intelligence (EI) is the ability to perceive and monitor both one's own and other's emotions and to make decisions accordingly (Salovey & Mayer, 1989). EI has been shown to be associated with positive mental health outcomes, particularly effective affect regulation within one's self, as well as the ability to consider others and form meaningful social relationships (Paek, 2006; Salovey & Mayer, 1989; Schutte et al., 2001).

Over the course of seven studies, Schutte et al. (2001) found that EI is related to a number of positive interpersonal outcomes. The first two studies assessed 24 students from a university in the southeastern United States (17 women, 7 men; mean age = 27.5) and 37 teaching interns (24 women, 13 men; mean age = 29.36) and found that higher levels of EI were significantly associated with higher levels of empathetic perspective-taking. In the third study, researchers assessed 77 university employees (44 women, 33 men; mean age = 53.22) and found that higher levels of EI were correlated with higher scores for social skills, such as social sensitivity and social expressivity. A fourth study surveyed 38 public school employees and college students (25 women, 13 men; mean age = 29.13) and found that EI was significantly linked to higher cooperation with others on a set of experimental trials. In the fifth study, 43 college students and church attendees (23 women, 20 men; mean age = 24.77 years) were asked to report on their EI and interpersonal relations; higher EI was related to higher levels of association with other people and levels of emotional involvement with others. The sixth study, comprised of 37 married employees (22 women, 15 men; mean age = 48.14), showed that EI was significantly related to greater marital satisfaction. Finally, in the seventh study, researchers surveyed 52 unmarried college students (28 women, 24 men; mean age = 19.08)

and found that participants rated prospective or respective dating partners with higher levels of EI as more satisfactory than dating partners who were less adept at recognizing and managing emotions. Based on their findings, Schutte et al. suggested that EI tends to facilitate and foster positive interpersonal relationships.

Research looking at religion and EI is limited; two studies (Liu, 2010; Paek, 2006) examined EI in relation to intrinsic and extrinsic religiosity. Liu (2010) surveyed 497 individuals (36.2% male) ranging in age from 15 to 65, recruited from three universities in Taiwan. Participants were asked to rate measures of personal religious orientation and EI. Liu found that personal, intrinsic religious orientation significantly predicted EI, whereas extrinsic religious orientation negatively predicted EI. The author suggested that understanding the relationship between EI and personal religious orientation could be important in helping people cope with and solve problems.

Paek (2006) also examined links between religious orientation and EI. She surveyed 148 individuals (72 females; mean age = 36) ages 18 to 73, recruited from six Christian churches in four states. Participants were asked to respond to measures indicating the ability to reflect upon and manage one's own emotions, perspective taking and empathetic concern, religious orientation, and

participation in a variety of religious activities. Intrinsic religious orientation and number of church activities individuals participated in were found to be significantly positively correlated with perceived EI. Extrinsic religiosity was negatively correlated with perceived EI. Significantly, religious attitudes more strongly predicted perceived EI than did religious behaviors. Paek argued that this finding continues to support the importance of conceptualizing religion as multidimensional; both religious behavior and attitudes are vital concepts to include in measurement. To date, no research exists that looks at specific religious attitudes toward the body, such as sanctification or radical dualism, in relation to emotional intelligence.

One important aspect of EI is emotion regulation, defined by Gratz and Roemer (2004) in this way:

Emotion regulation may be conceptualized as involving the (a) awareness and understanding of emotions, (b) acceptance of emotions, (c) ability to control impulsive behaviors and behave in accordance with desired goals when experiencing negative emotions, and (d) ability to use situationally appropriate emotion regulation strategies flexibly to modulate emotional responses as desired in order to meet individual goals and situational demands. (p.42)

Emotion regulation appears to play an important role in healthy, embodied functioning (Hughes & Gullone, 2011); conversely, a lack of emotion regulation has been linked to increased body dissatisfaction and disordered

eating (Lavender & Anderson, 2010; Sim & Zeman, 2005, 2006). Hughes and Gullone (2011) examined links between emotion regulation strategies, body image, and mood disorder symptoms in 533 Australian adolescents (39% male; mean age = 15.6). Participants were recruited from a longitudinal study of emotional development and were asked to rank body image concerns, emotion regulation strategies, eating disorder symptoms, depressive symptoms, and anxiety symptoms. Use of emotion regulation strategies such as positive acceptance of emotions and reappraisal of emotions was found to moderate the relationship between body image concerns and bulimic and depressive symptoms, regardless of participants' gender. Emotion regulation was not found to moderate the relationship between body image concerns and desire to be thin or anxiety symptoms.

Similarly, Sim and Zeman (2005, 2006) surveyed early adolescent girls to explore potential links between emotion regulation, bulimic behavior, and body dissatisfaction. Two hundred thirty-four adolescent girls (95.6% Caucasian; mean age 12 years, 11 months) in sixth through eighth grade were recruited from four public schools. All participants reported their levels of body dissatisfaction, bulimic symptoms, negative affect, emotion awareness, coping with negative emotion, and physical measurements. As expected, poor emotional awareness

and non-constructive coping with emotions partially mediated the relationship between body dissatisfaction and bulimic behavior. The authors suggested that girls with lower levels of emotional awareness may attribute their feelings to body dissatisfaction and turn to disordered eating behaviors as a way to cope with uncomfortable levels of emotional arousal.

A study by Lavender and Anderson (2010) examined potential links between difficulties in emotion regulation and body dissatisfaction. Significantly, this study only used male undergraduate participants (67% Caucasian; mean age = 18.9). Participants were asked to respond to measures of body attitudes, eating disorder symptoms, positive and negative affect, and difficulties in emotion regulation. The authors suggested that individuals who experience difficulties with regulating their emotions may also experience intense emotional distress, which may increase their risk of engaging in disordered eating. Consistent with this hypothesis, higher levels of difficulties in emotion regulation, particularly non-acceptance of emotional responses, was found to significantly predict disordered eating and body dissatisfaction. Additionally, men with more limited access to emotion regulation strategies were significantly more likely to engage in disordered eating than those without

such strategies. A strength of this study is that it focused on men, a typically underrepresented population in studies on body image and disordered eating.

To date, no studies have examined possible broader links between religious attitudes toward the body, gender, and emotion regulation; the present study hopes to rectify this. Sanctification of the body involves attending to one's body and investing time and energy in it, which suggests an awareness of one's self which might be linked to greater awareness of one's emotions.

Body agency. Being embodied creatures involves exploring one's physical abilities and limits. Agency is defined as a person's ability to control his or her actions, and through those actions, events in the external world (Haggard & Tsakiris, 2009; Longo & Haggard, 2012). A sense of agency transforms one's experience of the body; voluntary actions produce a more unified, coherent sense of one's body than do passive actions. Haggard and Tsakiris (2009) suggested that the experience of one's body as a unified entity is an important component of agency. Likewise, Gallese and Sinigaglia (2010) suggested that there is an intimate connection between action and bodily self-awareness. Not only being able to act, but also having the potential to act, reminds us of our embodied existence in the world. People experience a sense of agency and ownership of their bodies merely by the potential for action, even if they are not physically

able to carry out those actions. Studies have looked at people's experiences of their body agency, particularly in the area of sports and aging (Fischer, Altin, Ragnarsson, & Lundman, 2007; George, 2005; McDermott, 2000; Theberge, 2008; Wainwright & Turner, 2004; Wainwright, Williams, & Turner, 2005).

Participating in sports or other vigorous physical activities can be one arena in which people experience agency through their bodies (George, 2005; McDermott, 2000). Theberge (2008) found that some athletes actively engaged in understanding their bodies' capacities and limitations. Nine male and 11 female athletes in their 20s and 30s from Canada were recruited from teams representing three sports: field hockey, rowing, and wrestling. All participants were interviewed using a semi-structured format which focused on their histories of being injured and the health care they received. Theberge found that the athletes in this study developed a unique sense of how to "read" their bodies and respond accordingly, based on what they felt their bodies needed. Many athletes reported that even though they knew what their bodies needed, at times they found it difficult to stop and care for their bodies, such as getting adequate rest. Athletes reported understanding their bodies' capacities and limits; some also reported feeling that their bodies dictated when they had to stop in their

sport. Several athletes reported feeling a sense of separation from their body when they were injured.

Some athletes, such as ballet dancers, may know what their bodies need but choose instead to push past pain or exhaustion rather than resting (Wainwright & Turner, 2004; Wainwright, Williams, & Turner, 2005).

Wainwright et al. (2005) and Wainwright and Turner (2004) interviewed 9 ballet dancers (4 male; mean age = 26.5) and 11 ex-dancers (7 male; mean age = 54.9) from the Royal Ballet in London. The researchers explored ballet dancers' perceptions of their bodies, particularly in relation to injuries. When injured or limited by their bodies, athletes reported feeling their very identities were threatened, which often resulted in feelings of despair and devastation. When recovering from injury, ballet dancers reported sometimes feeling like strangers in their own body. The researchers suggested that although dancers know how to read their bodies, injury destroys their sense of embodiment.

George (2005) conducted participant observation and interviews of 21 female (95% Caucasian) collegiate soccer players over a period of two years. She found that women athletes often attempt to find a balance between what their bodies allow them to do in sports with expectations of what they should look like, a distinction she termed the *performance body* versus the *appearance body*.

Female athletes seemed to embrace the agency of their bodies while at the same time monitoring their bodies for excess muscle and fat. All participants in the study chose to engage fully in improving their bodies and skills for their performance, regardless of the potential physical effects on their bodies, such as gaining "too much" muscle. George concluded that although they felt pressure to maintain an appearance body, the women she interviewed ultimately felt empowered through their athletic involvement.

Even people who are not athletes by vocation experience a sense of being more connected to their bodies through physical activities (McDermott, 2000). McDermott (2000) interviewed two groups of women, one group of Canadian women who engaged in aerobics (no specified number of participants) and one group composed of seven Canadian women who participated in wilderness canoe-tripping. Participants ranged in age from 28 to 52 and were all White. McDermott found that women who engaged in physical activities such as aerobics and wilderness canoeing expressed a sense of increased confidence and empowerment through pushing past their perceived limits. The author suggested that various physical experiences may overlap with and shape other physical experiences of oneself, particularly in relation to physical appearance and activity. Although some participants initially engaged in physical activities

partially due to body image concerns, they expressed a sense of deeper connection to and comfort with their bodies after engaging in these physical activities. McDermott stated that it is essential for women to have positive, meaningful experiences of their physicality through physical activity, starting at a young age. She further argued that it is fundamentally important that girls recognize themselves as physical beings, not only to increase their sense of physical confidence, but also as a foundation for them to view themselves as more than objects.

Fischer et al. (2007) interviewed 40 individuals (29 female) ages 85 and up who were part of an ongoing study in Northern Sweden investigating elderly people's health and outlook on life. Participants were interviewed using thematic questions asking about important life events, the experience of aging, difficult and positive experiences, spiritual experiences, experiences of loneliness, and experiences of an aging body. One theme that emerged from participants was that agency as represented by bodily activity was important to feeling alive, connected to others, and making meaning in their lives. Not being able to perform activities or manage on one's own resulted in feelings of frustration and being hindered by one's body. Elderly people found satisfaction in being able to care for their bodies and being independent; threats to loss of mobility were seen

as precursors to isolation. The authors suggested that it is important to take into account people's subjective experience of their aging bodies.

To date, no studies have examined possible links between people's religiously-influenced attitudes toward their bodies and their experience of body agency.

## **Gender and Bodily Experiences**

Since Fredrickson and Roberts' (1997) development of objectification theory to explain women's experiences of living in a sexually objectifying culture, a large body of research has continued to document the greater prevalence of negative body issues among women than among men (e.g. Boyatzis & McConnell, 2006; Boyatzis et al., 2007; Boyatzis et al., 2006; Calogero & Tylka, 2010; Hayman et al., 2007; Jacobs-Pilipski et al., 2005; McKinley & Hyde, 1996; Roothman, Kirsten, & Wissing, 2003; Thompson et al., 2003; Weinberg & Williams, 2010). Some researchers suggest that men also face unique challenges in embodiment, including emotional regulation and questions about sexuality (Lavender & Anderson, 2010; Seidler, 2007; Tager, Good, & Morrison, 2006; Wilkins, 2009). Seidler (2007) suggested that dualistic attitudes contribute to men disavowing their bodies, sexuality, and emotional experience. He argued that through cultural stereotypes and values, men have learned to relate to their

bodies as "machines" that need to be controlled. Likewise, Wilkins (2009) asserted that cultural beliefs, such as the idea that men are primarily driven by needs for sex, are often linked to assumptions that men are unemotional and stoic. In contrast to these cultural stereotypes, Seidler (2007) advocated for men to explore their emotions and engage with their bodies. Two other empirical studies have looked at men's experiences of their bodies (Carlin, 2008; Tager et al., 2006).

Carlin (2008) interviewed eight male students at Princeton Seminary, seven of whom were in their 20s and single. Six men were White, one man was African American, and one man was from South America. Carlin first asked the men about their body image concerns in relation to media portrayals of male sexuality. Secondly, he asked the men to comment on what they would change about their own bodies, given the chance. Important themes that emerged included the men's ambivalent feelings about their bodies, the importance of their childhood experiences and experiences with women, and religious themes. Almost all the men stated that they would change something about their bodies and that their experiences of growing up, particularly sexual experiences, influenced their feelings about their bodies. The men reported their sexual experiences with women significantly impacted their feelings about their bodies,

particularly if they were unable to perform sexually or if a woman found them sexually unattractive. Several men talked about how religion had encouraged them to find their worth in God, rather than in their body image. After interviewing his subjects, Carlin concluded that although none of the participants reported acute problems with body image, all of them had a chronic, underlying anxiety and concern about their bodies. It should be noted that the small number of participants in this study severely limits an ability to generalize its results.

Tager et al. (2006) explored associations between body image, masculine norms, and psychological well-being in male undergraduates. One hundred and one male college students from the northeastern United States (89% White; mean age = 19.45) were asked to respond to measures of body image, psychological well-being, masculine norms, and experiences of being bullied and/or victimized. The researchers found that men's self-evaluation of appearance was a significant predictor of psychological self-acceptance. Participants with higher levels of adherence to the masculine norm of dominance, measured by items such as, "In general, I must get my way" also reported significantly higher body satisfaction and self-acceptance. Men who reported experiences of being victimized as children reported lower levels of body satisfaction. Tager et al. suggested that

these findings lend support to the idea that men who are perceived as "weak" experience increased body dissatisfaction, which in turn leads to distress and feelings of inadequacy. They further suggested that men feel pressure to conform to a thin, muscular ideal and must either bulk up or tone down to achieve that appearance. A significant contribution of this study is that it adds to an understanding of the body image concerns men experience; the authors stated that further research is needed to explore the complex relationships between men's identity, self-worth, and evaluations of their appearance.

Beyond just looking at gender differences in body image, several studies have examined how men and women differ in other aspects of bodily experience (DeSouto Barreto, Ferrandez, and Guilhard-Costa, 2011; Roothman et al., 2003). DeSouto et al. (2011) examined older men and women's perceptions of body functioning, in addition to body satisfaction. They surveyed 384 adults (141 men; mean age = 70.9) recruited from communities in southeastern France. Participants were asked to rate their levels of body satisfaction and their satisfaction with their bodily functioning, as well as their volume of physical activity, chronic pain, self-reported health, and body mass index. Satisfaction with body functioning was assessed by items asking about being physically fit, having physical endurance, the physical ability to do what one wanted, and

overall muscle strength. Similar to previous research, women reported being less satisfied with their bodies than men. For women, age was not significantly correlated with body satisfaction; however, for men, being older was related to experiencing lower levels of body satisfaction. The authors suggested that older men, as well as younger adult men, may adhere to socio-cultural pressures to correspond to a lean, muscular "ideal." For both genders, satisfaction with body appearance was an important predictor of satisfaction with body functioning, though it was a stronger predictor for men than for women. Age was also a significant predictor of satisfaction with body functioning.

Roothman et al. (2003) examined links between gender and various aspects of psychological well-being. Participant data were drawn from an existing data pool gathered for a study on psycho-social well-being which spanned several universities. Participants were 90 men and 288 women ranging in age from 18 to 65; over half of participants were between the ages of 18 and 25 and the majority of individuals were White. Roothman et al. found that after assessing both genders using various measures of psychological well-being, men scored significantly higher than women in the areas of body self-esteem and their general physical well-being. Women scored significantly higher than men on measures of spiritual well-being and somatic symptoms. The authors suggested

that for women, increased body dissatisfaction could lead to increased body monitoring and awareness of somatic symptoms; conversely, they suggested that men may be less likely to report genuine somatic symptoms because of a desire to conform to "masculine" standards of physical invulnerability. Although no gender differences were found regarding the experience of affect, both negative and positive, women scored significantly higher than men on measures assessing the expression of empathetic affect. The authors suggested that men may feel a culturally-influenced need for independence and suppressed emotion, whereas women may feel more freedom to express emotional intimacy and nurturing.

Given these existing gender differences in experiences of the body, it is possible that women and men may experience the influences of religiously-based attitudes toward the body differently. Most studies exploring the relationship between religion and the body to date have tended to focus on women—an omission that the current study attempts to remediate.

# The Present Study

The purpose of the present study was to examine the relationship between people's experiences of their body and the attitudes of sanctification and radical dualism in relation to the body. First, it was hypothesized that radical dualism would be negatively correlated with the attitude of body satisfaction, positively

correlated with the attitudes of body objectification, body guilt and shame, positively correlated with the experiences of depersonalization and somatization, negatively correlated with the experiences of internal body awareness, sexuality awareness, and positively correlated with difficulty in emotion awareness.

Second, it was hypothesized that sanctification would be positively correlated with the attitude of body satisfaction, negatively correlated with the attitudes of body objectification, body guilt and shame, negatively correlated with the experiences of depersonalization, and somatization, positively correlated with the experiences of internal body awareness, sexuality awareness and negatively correlated with difficulties in emotion awareness.

Third, it was hypothesized that gender would moderate the relationship between the attitudes of radical dualism and sanctification and the outcome measures.

Fourth, it was hypothesized that gender would moderate the relationship between age and sexual awareness; given the existing gender differences in experiences of embodiment, it was suggested that men might be more aware of their sexuality at younger ages, whereas women might increase in sexual awareness over time.

Fifth, it was hypothesized that age would moderate the relationship between sanctification and sexuality awareness. Based on existing research regarding marriage and sexuality, it was suggested that as people age, both their sexual awareness and sanctified views about their body would increase.

The sixth hypothesis was that body shame would mediate the relationship between radical dualism and objectification and the relationship between sanctification and objectification.

The seventh hypothesis was that participants who reported being involved in activities such as running, club-level athletics, or dance would report higher levels of sanctification and lower levels of radically dualistic attitudes toward the body than participants who did not report such activity.

Eight, it was hypothesized that participants who engaged in spiritual disciplines would report higher levels of sanctification and lower levels of radical dualism than those who did not report such activity.

Likewise, it was hypothesized that being involved in varsity or club-level athletics, dance, running, or participating in sports of any kind would be correlated with higher levels of internal awareness and lower levels of depersonalization and somatization.

Based on previous research, it was hypothesized that intrinsic religiosity would be positively correlated with the attitude of body satisfaction, negatively correlated with the attitude of body objectification, and negatively correlated with difficulties in emotion awareness, whereas extrinsic religiosity would be negatively correlated with the attitude of body satisfaction, positively correlated with the experience of body objectification, and positively correlated with difficulties in emotion awareness.

It was hypothesized that extrinsic religiosity would be correlated with radically dualistic attitudes toward the body, whereas intrinsic religiosity would be correlated with a sanctified view of the body.

Finally, it was hypothesized that sanctification and radical dualism, as attitudes directly related to the body, would be related to attitudes and experiences of the body above and beyond the more general constructs of religious commitment and intrinsic/extrinsic religiosity.

#### CHAPTER 2

#### **METHOD**

## **Participants**

Participants were 243 adults. One hundred fifty-eight participants (65%) were female, 65 (27%) were male, and 20 (8%) did not indicate their gender. Of participants surveyed, 211 (87%) self-identified as Caucasian/European American, 11 (5%) as Asian/Asian American, 2 (1%) as "Mixed," 1 (<1%) as Hispanic/Latino/Latina, and none as Black/African American. Ages ranged from 18 to 80 years with an average age of 37 years.

One hundred fifty-nine (65%) participants reported being married, 45 (19%) were single or never married, 16 (7%) participants were dating or engaged, 5 (2%) reported being divorced, and 1 (<1%) was a widow/widower. Of those surveyed, 14 (6%) had a doctorate degree, 79 (33%) had an MA or equivalent degree, 118 (49%) were college graduates, 13 (5%) reported some college

education, 2 (1%) had a high school degree, and 17 (7%) did not specify their level of education. Two hundred twenty (91%) participants self-identified as heterosexual, with 2 (1%) identifying as gay or lesbian, 2 (1%) as bisexual, and 1 (<1%) as "Other."

Participants came from a variety of denominations within the Protestant religious tradition including Baptist, Presbyterian, Evangelical Free, Lutheran, Methodist, and Non-Denominational. A link to the study was emailed to contacts who work in Christian organizations, are enrolled in Christian schools, and/or who attend Christian churches. Participants were recruited from all around the United States, particularly the West Coast and Midwest.

#### Instruments

#### Measures of Religiously Influenced Attitudes Toward the Body

Four measures of religiously influenced attitudes toward the body were used, one to assess radically dualistic attitudes toward the body and three to measures sanctified views of the body.

**Dualistic attitudes toward the body**. The Dualism Scale is a measure designed for the current study to assess the extent to which participants hold radically dualistic views about their bodies. Participants rate 12 items using a 7-

point scale ranging from 1 (strongly disagree) to 7 (strongly agree). Items include the following statements: My body is just something I live in here on earth; My body is basically sinful; My soul is more important to God than my body; I can hardly wait to escape my body when I die; My body frequently causes me to sin; I do not see my body as important in the process of spiritual formation; My body is an important part of me (reverse-scored); God did not intend for us to be in our bodies forever; Often, I cannot control my body's urges; It seems that sins of the body, such as sexual sin, are worse than other kinds of sins; When I'm making a decision, I do not take into account my emotions, only my rational thoughts; I'm engaged in a life-long struggle to subdue the lusts of the body. Part of the purpose of this study was to assess whether this scale has internal consistency and reliability. In this study, the Dualism Scale obtained an alpha coefficient of .79. Scores were obtained by calculating the mean for all items. Higher scores represent a higher level of radically dualistic thinking regarding one's body.

Sanctification of the body. Three measures were used to assess sanctification, the Sacred Qualities of the Body scale, the Manifestation of God in the Body Scale, and the Christian Teachings on the Body Scale.

The Sacred Qualities of the Body scale (Mahoney et al., 2005) is used to measure sanctification of the body and is comprised of 10 items that assess the

degree to which the body is perceived as having sacred or divine qualities.

Using a 7-point Likert scale ranging from 1 (*does not describe at all*) to 7 (*very closely describes*), participants indicate the degree to which they feel specific words apply to the body: *blessed, holy, sacred, spiritual, miraculous, divine, hallowed, spirit-filled, heavenly,* and *religious*. This scale makes no mention of God, a higher power, or any divine being. It was normed on 289 college students (77.5% female; average age = 19.2 years) and had an alpha coefficient of .95 in the original sample and .85 in the current sample. A total score was obtained by calculating a mean for the 10 items. Higher scores represent a higher perception of the body as having sacred qualities.

The Manifestation of God in the Body Scale (Mahoney et al., 2005) is used to measure the degree to which the body is perceived as an expression or manifestation of God. It is an explicitly theistic scale, including 12 items such as *My body is a gift from God; God is glorified through my body.* This scale is neutral about the direction of influence of God on the body. Participants rate items on a 7-point scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). It was normed on 289 college students (77.5% female; average age = 19.2 years) and had an alpha coefficient of .98. In the present study it had an alpha coefficient of .89. A

total score was obtained by calculating a mean for the twelve items, with higher scores representing a greater perception of the body as a manifestation of God.

**Christian teachings on the body**. The Christian Teachings on the Body Scale measures the extent to which a participant endorses explicitly Christian teachings about his or her body, in contrast to the more generically-worded items of the other two sanctification measures. It was derived from a factor analysis of an earlier version of the Radical Dualism Scale (Jacobson, 2011) than the one used in the present study, the Sacred Qualities of the Body Scale, and the Manifestation of God in the Body Scale. It is comprised of 14 items rated on a 7point Likert scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). Items taken from the Sacred Qualities of the Body Scale include the following: My body is miraculous; My body is Spirit-filled; My body is blessed; My body is holy. Items taken from the Manifestation of the God in the Body Scale include the following: My body is a temple of God; My body is a gift from God; God is glorified through my body (modified to I glorify God through my body). Seven items new to this scale include: My body is a living sacrifice to God; I serve God through my body; It does not matter what I do with my body (reverse-scored); I can do whatever I want with my body (reverse-scored); I honor God through my body; My body is a temple of the Holy *Spirit; My body is fearfully and wonderfully made.* Total scores were calculated by

obtaining a mean for all items, with higher scores representing a higher endorsement of explicitly Christian teachings about the body. No norms existed previously for this scale; in the present study, it obtained an alpha coefficient of .91.

# Religiosity

Religious commitment. The Religious Commitment Inventory

(Worthington et al., 2003) measures the degree to which individuals are deeply committed to their religious beliefs and practices. Using a 5-point scale ranging from 1 (not at all true of me) to 5 (totally true of me), participants rate 10 items such as the statement, Religious beliefs influence all my dealings in life. Although the Religious Commitment Inventory has two subscales (Intrapersonal and Interpersonal), only the total score was used in the present study. This scale was normed on 155 undergraduates and had an alpha coefficient of .93 for the total scale in the original sample and .89 in the current study. Total scores for the overall measure were obtained by calculating a mean for item scores. Higher scores indicate more commitment to one's religious beliefs and practices.

Religious orientation. The Intrinsic/Extrinsic-Revised Scale (Gorsuch & McPherson, 1989) is a revised version of the Allport and Ross (1967) Religious Orientation Scale. It is designed to assess the level of intrinsic and extrinsic

religious commitment of a participant. This scale consists of 14 items, eight intrinsic items (alpha = .83 in the original sample, .76 in the current sample) and six extrinsic (alpha = .65 in the original sample and .66 in the current sample) items. All items are rated on a 5-point scale that range from 1 (*strongly disagree*) to 5 (*strongly agree*). Examples of items include, *I go to church because it helps me to* make friends (extrinsic); I have often had a strong sense of God's presence (intrinsic). This scale was normed on 771 college students from both secular and religious institutions; no age or gender demographics are available. Given the robustness of the extrinsic scale in previous studies, analyses using this scale were used in the current study, in spite of the alpha of .66. However, in order to further explore the effects of extrinsic religiosity, as suggested by Gorsuch and McPherson (1989), we also used the two subfactors, extrinsic-social and extrinsicpersonal. Although the alphas of these subfactors were also below .70 (.69 for the social subfactor, and .61 for the personal subfactor), it should be noted that alpha is influenced by the number of items, and consequently these alphas are acceptable for these 3-item scales. Total scores were obtained by reverse-scoring as indicated and taking a mean of the items in each subscale, with higher scores representing higher levels of either intrinsic or extrinsic religious orientation.

## Measures of Bodily Experience

Twelve measures of bodily experience were used, three to operationalize body satisfaction, two to operationalize body shame and guilt and sensation awareness, and one measure for each of the remaining body experiences.

**Body satisfaction**. Body satisfaction was assessed with three instruments, the Body Areas Satisfaction Subscale of the Multi-Dimensional Body-Self Relational Questionnaire, the Body Esteem Scale for Adolescents and Adults, and the Body Appreciation Scale.

The Multi-Dimensional Body-Self Relational Questionnaire (MBSRQ) was developed by Brown, Cash, and Mikulka (1990) to assess aspects of the body-self construct. The MBSRQ includes seven main subscales: Appearance Evaluation, Appearance Orientation, Fitness Evaluation, Fitness Orientation, Health Evaluation, Health Orientation, and Illness Orientation as well as three additional, separate subscales: the Body Areas Satisfaction Scale (BASS), the Overweight Preoccupation Scale, and the Self-Classified Weight Scale. This study used only the BASS, which measures dissatisfaction and satisfaction with body areas and attributes. Participants rank nine areas of the body (face, lower torso, weight, hair, etc.) using a 5-point scale ranging from 1 (very dissatisfied) to 5 (very satisfied). The BASS was normed on 804 women and 335 men; all

participants were age 18 or older. Alpha levels for the BASS ranged from .77 - .86 for males and .73 - .74 for females in the original sample. In the current study, the alpha coefficient was .82. Scores for the BASS were obtained by reverse-scoring as indicated and calculating a mean for the items. Greater scores indicate higher levels of body satisfaction with body areas and attributes.

The Body Esteem Scale for Adolescents and Adults (BESAA) was developed by Mendelson et al. (2001) to measure participants' attitudes and feelings about their bodies and appearances. Thirty items are ranked using a 5point scale ranging from 0 (*never*) to 4 (*always*). Examples of items include the following: I like what I look like in pictures; my weight makes me unhappy. Negative items are reverse-scored. The BESAA was normed on 1334 people (763 females; 541 males) between the ages of 12 and 25 years (average age = 16.8 years). It includes three factor subscales; according to the authors, the three factor subscales should be scored individually (Mendelson et al., 2001). For the purposes of this study, only the Body-Esteem Appearance subscale was used. The Body Esteem-Appearance subscale consists of 10 items that measure general feelings about appearance (alpha = .92 in the original sample, .74 in the current sample). Subscale scores were obtained by reverse-scoring negatively-worded

items and calculating a mean for all items. Higher scores on a subscale indicate more positive body esteem on that particular dimension.

The Body Appreciation Scale (BAS; Avalos, Tylka, & Wood-Barcalow, 2005) consists of 13 items that measure a person's respect for and satisfaction with his or her body. Items are ranked on a 5-point scale ranging from 1 (*never*) to 5 (always) and consist of statements such as, I feel good about my body and I take a positive attitude toward my body. The BAS was normed on 181 college women (average age = 20.24) and had an alpha coefficient of .94. In the present study, it had an alpha coefficient of .91. A total score for this measure was obtained by reverse-scoring items as indicated and calculating a mean for all items. Higher scores indicate a greater sense of appreciation and respect for one's body. It should be noted that to date, no studies have used the BAS with men; the authors stated that when giving this scale to men, researchers should revise item 12. The original item reads, I do not allow unrealistically thin images of women presented in the media to affect my attitudes toward my body. As it currently stands, this item reads, [If you are a woman] I do not allow unrealistically thin images of women presented in the media to affect my attitudes toward my body; [If you are a man] I do not allow unrealistically muscular images of men presented in the media to affect my attitudes toward my body.

Body objectification. The Objectified Body Consciousness Scale (McKinley & Hyde, 1996) consists of 24 items designed to measure body objectification. Participants use a 7-point scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*) to rate statements such as the following, *During the day, I think about how I look many times* and *I feel like I must be a bad person when I don't look as good as I could*. The Objectified Body Consciousness scale includes three subscales, the first of which is Body Surveillance (alpha = .89 in the original study). The alpha coefficient for this subscale in the present study was .65; by eliminating the items *I think more about how my body feels than how my body looks* and *I am more concerned with what my body can do than how my body looks*, the alpha was increased to .67. The alpha was not significantly improved by deleting any further items.

The second subscale of the Objectified Body Consciousness Scale is Body Shame (alpha = .75 in the original study and .71 in the current study). The final subscale is Appearance Control Beliefs (alpha = .72 in the original study). This measure was originally normed on 502 undergraduate women (average age = 20 years); results were later replicated on 278 undergraduate women (average age = 18.41 years) and 151 middle-aged women (average age = 46.32 years). Subscale scores were calculated by reverse-scoring items as indicated and then calculating

a mean for the items. Higher scores indicate the presence of the subscale trait.

For the purposes of this study, the Body Surveillance Subscale was used to operationalize body objectification, and the Body Shame Subscale was used to operationalize body shame, as indicated below. According to the authors, a total score for this scale is not relevant and is therefore not calculated.

**Body guilt and shame**. Two measures were used to measure body guilt and shame, the Body Shame Subscale of the Objectified Body Consciousness Scale and the Body Image Guilt and Shame Scale.

As noted above, the Objectified Body Consciousness Scale (McKinley & Hyde, 1996) consists of 24 items designed to measure body objectification. It includes three subscales: Body Surveillance, Body Shame, and Appearance Control Beliefs (alpha levels and information on norms listed above). Subscale scores were calculated by reverse-scoring items as indicated and then calculating a mean for the items. Higher scores indicate the presence of the subscale trait. For the purposes of this construct, only the Body Shame Subscale will be used.

The Body Image Guilt and Shame Scale (BIGGS; Thompson et al., 2003) assesses a participant's level of body shame (negative evaluations about one's body) and body guilt (taking action to "fix" a perceived transgression).

Participants are given 15 scenarios, followed by four response options: (a) shame

proneness; (b) guilt proneness; (c) externalization; (d) detachment. They then rate response option from 1 (*very unlikely*) to 5 (*very likely*). This scale was normed on 153 undergraduates (56.8% women; average age = 21.26) and had an alpha coefficient of .88 for guilt responses and .90 for shame responses in the original study. In the present study, the alpha coefficients were .82 for guilt responses and .92 for shame responses. Total scores were obtained by calculating the mean of all items; higher scores represent higher levels of body guilt and body shame.

Depersonalization. The Cambridge Depersonalization Scale (Sierra & Berrios, 2000) consists of 29 items designed to assess the frequency and duration of depersonalization symptoms over the last six months. Participants rate the frequency (4-point scale; 0= never; 4 = all the time) and duration (6-point scale; 0 = a few seconds; 3 = a few hours; 6 = more than a week) of symptoms. For the present study, only frequency of symptoms was assessed. Examples of items include: Parts of my body feel as if they didn't belong to me; when I weep or laugh I do not seem to feel any emotions at all. The Cambridge Depersonalization Scale was normed on 35 patients with the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV; American Psychiatric Association, 1994) depersonalization disorder, 22 with anxiety disorders, and 20 with temporal lobe epilepsy. The alpha coefficient for

this scale was alpha = .89 in the original study and .92 in the present study. Total scores were obtained by calculating a mean for all items. Higher scores indicate greater levels of depersonalization.

Somatization. The Four Dimensional Symptom Questionnaire (4DSQ; Terluin et al., 2006) assesses common psychological symptoms and distinguishes general distress from depression, anxiety, and somatization. The 4DSQ was normed on 3852 people (91% male; average age = 43.9 years). It includes four subscales: Distress, Depression, Anxiety, and Somatization. For the purposes of this study, only the somatization subscale was used (alpha = .82 in the original sample, .71 in the present study). The somatization subscale contains 12 items such as, *During the past week did you suffer from dizziness or feeling light headed?*Neck pain? Headache? Items are rated using a 5-point scale ranging from no to very often/constantly. Scores for the somatization subscale were obtained by calculating a mean for all items. Higher scores represent higher levels of somatization.

Internal body awareness. Two instruments were used to assess body awareness, the Body Awareness Questionnaire and the Body Experience Questionnaire.

The Body Awareness Questionnaire (BAQ; Shields, Mallory, & Simon, 1989) was designed to measure attentiveness to normal body processes, specifically body cycles and rhythms, body reactions, and changes in body functioning. This scale consists of 18 items rated on a 7-point Likert scale ranging from 1 (not at all true about me) to 7 (very true about me). Examples of items include, I notice specific bodily reactions to being over-hungry; I notice distinct body reactions when I am fatigued. It was normed on 450 participants (51.3% female; average age = 23.1) and in the original sample, had an overall alpha coefficient of .83. In the present study, the Body Awareness Questionnaire had an alpha coefficient of .89. Total scores for this scale were obtained by calculating a mean for all items, with higher scores indicating higher levels of awareness.

The Body Experience Questionnaire (Bode, Van der Heij, Taal, & Van de Laar, 2010), consists of 10 items that measure alienation and harmony experiences of one's body. Items are rated on a 4-point scale ranging from 1 (totally disagree) to 4 (totally agree). This scale consists of two subscales, Alienation and Harmony. The Alienation subscale contains six items; examples of items include, My body is a burden to me; I feel betrayed by my body (alpha = .84 in the original sample, .80 in the present study). The Harmony subscale consists of four

items such as, *My body lets me know what is good for me; My body feels familiar to me* (alpha = .76 in the original sample, .78 in the present study). This scale was normed on 168 patients (61.9% female; average age = 54.2) in an outpatient rheumatology clinic. Total scores were obtained by calculating a mean for all items for each subscale, with higher scores indicating higher levels of perceived alienation from or harmony with one's body.

Sexuality awareness. The Sexuality Awareness Scale (Snell, Fisher, & Miller, 1991) was designed to measure personality tendencies associated with sexual awareness and assertiveness. It consists of 36 items ranked on a 5-point scale ranging from 0 (not at all characteristic of me) to 4 (very characteristic of me). Participants rate how well each statement represents them; for example, I am very aware of my sexual feelings; I usually worry about making a good sexual impression on others. The four subscales of the Sexuality Awareness Scale are (a) Sex Appeal Consciousness, (b) Sexual Assertiveness (ones' ability to be assertive about sexual needs), (c) Sexual Consciousness (thinking about one's sexuality), and (d) Sexual Monitoring (awareness of the impression one's sexuality makes on others). For the purposes of this study, only the Sexual Consciousness and Sexual Monitoring subscales were used. Alpha ranges for each subscale are as follows: Sexual Consciousness (alpha = .83 - .88 in the original sample; alpha =

.94 in the present study); and Sexual Monitoring (alpha = .80 - .82 in the original study; alpha = .71 in the present study). The Sexuality Awareness Scale was normed on two samples consisting of 772 undergraduates total (530 men, 234 women, 8 gender unspecified) with an average age of 24.1 for Sample 1 and 24.07 for Sample 2. Scores from each subscale were obtaining by calculating a mean for the items; higher scores on each subscale represent higher levels of the respective tendency measured.

Emotion awareness. The Difficulties in Emotion Regulation Scale (DERS; Gratz & Roener, 2004) measures difficulties within the following six factors of emotion regulation: (a) non-acceptance of emotional responses (Non-acceptance); (b) difficulties engaging in goal-directed behavior (Goals); (c) impulse control difficulties (Impulse); (d) lack of emotional awareness (Awareness); (e) limited access to emotion regulation strategies (Strategies); and (f) lack of emotional clarity (Clarity). Each factor is considered a subscale; the overall alpha coefficient for the scale is .93. All items are rated on a 5-point scale ranging from 1 (almost never) to 5 (almost always). The Non-acceptance subscale has six items (alpha = .85); a sample item is When I'm upset, I feel guilty for feeling that way. The Goals subscale has five items (alpha = .89) and includes items such as, When I'm upset, I have difficulty getting work done. The Impulse subscale, with six items (alpha =

.86), includes items such as, *When I'm upset, I lose control over my behaviors*. The fourth subscale, Awareness, has six items (alpha=.80), such as, *I pay attention to how I feel* (reverse-scored). The Strategies subscale includes eight items (alpha=.88) such as, *When I'm upset, it takes me a long time to feel better*. In the present study, the Awareness subscale had an alpha coefficient of .84. Finally, the Clarity subscale, with five items (alpha=.84) includes items such as, *I have no idea how I am feeling*. In the present study, the Clarity subscale had an alpha coefficient of .71. The DERS was normed on 378 undergraduates (68.7% women; average age=23.10). Total scores were obtained by reverse-scoring as indicated and calculating a mean for the items. Higher scores represent greater difficulties in emotion regulation. For the purposes of this study, only the Awareness and Clarity subscales were used.

## **Demographics**

Participants were given a form on which they indicated their gender, age, ethnicity, and sexual orientation. Additionally, they were asked to indicate their marital status (married/divorced/widow or widower/ dating or engaged/ single-never married) and number of sexual partners in the last month. Participants were asked about their highest level of education completed (high school/college/graduate school). They were also asked to indicate their religious

tradition (Protestant/Catholic/ Orthodox/ Jewish/ Muslim/ Buddhist/ Agnostic/ Atheist/ Other). Only those who indicated Protestant were used in this study; they were asked to write in their denomination. Participants were also asked to indicate whether they currently participate in or have participated in the following activities: varsity or club level athletics, dance (e.g., ballet, tap, jazz), long-distance running (e.g., half-marathons or marathons), and sports of any kind. Participants were asked to rate duration of their involvement in these activities. As an exploratory measure, participants were asked to indicate their frequency of engaging in spiritual discipline activities such as contemplative prayer, meditation, fasting, and study. Participants rated each spiritual discipline activity on a 5-point Likert scale ranging from 1 (never) to 5 (daily). All instruments used in this study are included in Appendix A.

## **Procedure**

Before recruiting participants, the researcher submitted the proposal to the Protection of Human Rights in Research Committee for ethical approval. Once the study was approved, participants were recruited via email, using the snowball technique. If they chose to participate in the study, participants were entered into a raffle for one of four \$50 gift cards to Amazon.com. All

participants accessed the informed consent and survey questions online. Participants' names, gathered for entry in the raffle, were gathered electronically, separately from their surveys and were not paired with the data. Once they agreed to the informed consent, participants proceeded to the measures. All participants were asked to fill out all questionnaires relating to attitudes about the body and experiences of the body. After completing the measures, participants were asked to fill out demographic information. The study took approximately 30 to 45 minutes to complete. Data was accessed only by the researchers and was kept confidential.

#### CHAPTER 3

#### **RESULTS**

## **Preliminary Analyses**

Data were analyzed using SPSS. The original non-transformed means and standard deviations for all measures are shown in Table 1. All measures were assessed for normality and homoscedasticity. The measures of depersonalization, somatization, body objectification, the Body Experience Questionnaire-Alienation subscale, and the Sexual Monitoring subscale were found to be positively skewed. Square root transformations corrected the measures of objectification and depersonalization, while logarithmic transformations corrected the Body Experience Questionnaire-Alienation subscale. Inverse transformations were conducted to correct the measure of somatization and the Sexual Monitoring subscale.

Table 1

Means and Standard Deviations for Dualism, Sanctification, and All Outcome Measures

Measure	M	SD
Dualism Scale	3.10	.97
Sacred Qualities of the Body Scale	4.54	1.12
Manifestation of God in the Body Scale	5.79	.99
Christian Teachings on the Body Scale	6.12	.80
Religious Commitment Inventory	4.21	.72
Intrinsic/Extrinsic- Intrinsic Subscale	4.30	.50
Intrinsic/Extrinsic- Extrinsic Subscale	2.29	.57
Intrinsic/Extrinsic- Extrinsic social subfactor	2.16	.70
Intrinsic/Extrinsic- Extrinsic personal subfactor	2.42	.74
Body Areas Satisfaction Subscale	3.57	.62
Body Esteem- Appearance Subscale	2.72	.40
Body Appreciation Scale	3.78	.55
Objectified Body Consciousness-Surveillance	4.84	.72
Objectified Body Consciousness Scale- Shame	3.50	1.04
Body Image Guilt and Shame- Shame subscale	2.80	.89
Body Image Guilt and Shame- Guilt subscale	3.05	.67
Cambridge Depersonalization Scale	.35	.31
Four Dimensional Symptom Questionnaire	1.46	.36
Body Awareness Questionnaire	4.29	.98
Body Experience Questionnaire- Alienation subscale	1.56	.55
Body Experience Questionnaire- Harmony subscale	3.11	.55
Difficulties in Emotion Regulation- Awareness	4.16	.49
Difficulties in Emotion Regulation- Clarity subscale	2.75	.45
Sexual Consciousness Subscale	2.93	.95
Sexual Monitoring Subscale	2.27	.51

The Religious Commitment Inventory and the Intrinsic/Extrinsic Scale-Intrinsic subscale, the Manifestation of God in the Body Scale, the Christian Teachings on the Body Scale, the Body Experience-Harmony subscale, and the Sexual Consciousness subscale were found to be negatively skewed. Before any transformations were conducted, all of these measures were reflected by subtracting the mean of each score from the highest score attained, plus one. This reflected the data so that it became positively skewed and thus able to be transformed. It should be noted, however, that reflecting the data in this way changed the meaning of the scores for these measures. In order to avoid confusion when interpreting results between multiple reflected measures, the scores for these measures were re-reflected after being transformed.

A square root transformation corrected for the skewness in the Manifestation of God in the Body Scale, the Intrinsic/Extrinsic Scale-Intrinsic Subscale, the Sexual Consciousness subscale, and the Body Experience-Harmony subscale. Logarithmic transformations corrected the Religious Commitment Inventory and the Christian Teachings on the Body Scale. The transformed and re-reflected scores for all of these measures were utilized in all subsequent analyses.

## **First Hypothesis**

First, it was hypothesized that radical dualism would be negatively correlated with the attitude of body satisfaction, positively correlated with the attitudes of body objectification, body guilt and shame, positively correlated with the experiences of depersonalization, somatization, and difficulty in emotion awareness, and negatively correlated with the experiences of internal body awareness and sexuality awareness. This hypothesis was partially supported; out of 16 analyses run, 4 were significant. One-tailed, zero-order correlations were run to assess the relationships between the Dualism Scale and the 16 scales and subscales reflecting attitudes and experiences of the body (Body Areas Satisfaction Subscale, Body Esteem-Appearance Subscale, Body Appreciation Scale, Objectified Body Consciousness-Body Surveillance Subscale, Objectified Body Consciousness-Body Shame Subscale, Body Image Guilt and Shame Scale-Guilt Subscale, Body Image Guilt and Shame Scale-Shame Subscale, Difficulties in Emotion Regulation-Awareness Subscale, Difficulties in Emotion Regulation-Clarity Subscale, Cambridge Depersonalization Scale, Four Dimensional Symptom Questionnaire, Body Awareness Questionnaire, Body Experience Scale-Harmony Subscale, Body Experience Scale-Alienation Subscale, and the

Sexual Consciousness Subscale and Sexual Monitoring Subscale) as shown in Tables 2 (attitudes) and 3 (experiences).

Due to the large number of correlations, Bonferroni corrections were calculated by dividing .05 by the number of correlational analyses run for both body attitudes (seven) and body experiences (nine) with radical dualism. The resulting cutoff values were p < .007 for body attitudes and p < .006 for body experiences.

## **Body Attitudes**

The Dualism Scale was found to be negatively correlated with body satisfaction, as measured by the Body Appreciation Scale (r = -.25, p < .001). It was also positively correlated with body shame, as measured by the Objectified Body Consciousness-Shame subscale (r = .26, p < .001). Dualism was not significantly correlated with the measures of body objectification or body guilt.

Table 2

Intercorrelations Between Dualism and All Body Attitude Measures

Measure	1	2	3	4	5	6	7	8
1. DS	_	_	_	_	_	_	_	_
2. BASS	15		_	_	_			
3. BE-APP	06	.59*			_			
4. BAS	25*	.69*	.60*	_	_	_	_	_
5. OBCS-SRV	.12	26*	13	35*	_	_	_	_
6. OBCS-SHM	.26*	50*	47*	63*	.38*	_	_	_
7. BIGSS-SHM	.16	53*	56*	61*	.36*	.55*	_	_
8. BIGSS-GLT	.09	28*	41*	.22*	.20*	.32*	.50*	_

Note. DS = Dualism Scale; BASS = Body Areas Satisfaction Subscale; BE-APP = Body Esteem Scale- Appearance Subscale; BAS = Body Appreciation Scale; OBCS-SRV = Objectified Body Consciousness- Surveillance Subscale; OBCS-SHM = Objectified Body Consciousness- Shame Subscale; BIGSS-SHM = Body Image Guilt and Shame Scale- Shame; BIGSS-GLT = Body Image Guilt and Shame Scale- Guilt, \*p < .007.

Table 3

Intercorrelations Between Dualism and All Body Experience Measures

Measure	1	2	3	4	5	6	7	8	9	10
1. DS	_									
2. DEP	.19*	_	_					_		
3. SOM	06	.24*	_					_		
4. BAQ	04	.13	.07					_		
5. BEQ-ALN	.30*	43*	.38*	53*				_		
6. BEQ-HRM	10	.32*	.17*	.40*	.03			_		
7. DERS-AWR	.03	10	13	17*	11	.02		_		
8. DERS-CLR	.13	11	18*	21*	.00	.07	.49*	_		
9. SEXCON	02	.00	.13	.06	05	04	18*	15		
10. SEXMON	17*	.25*	.25*	.29*	36*	32*	01	04	10	

Note. DS = Dualism Scale; DEP = Cambridge Depersonalization Scale; SOM = Four Dimensional Symptom Questionnaire; BAQ = Body Awareness Questionnaire; BEQ-ALN = Body Experience Questionnaire- Alienation; BEQ-HRM = Body Experience Questionnaire- Harmony; DERS-AWR = Difficulties in Emotion Regulation- Awareness; DERS-CLR = Difficulties in Emotion Regulation- Clarity; SEXCON = Sexual Consciousness Subscale; SEXMON = Sexual Monitoring Subscale, \*p < .006.

## **Body Experiences**

Dualism was also positively correlated with depersonalization as measured by the Cambridge Depersonalization Scale (r = .19, p < .003) and lack of internal body awareness, as measured by the Body Experience Questionnaire-Alienation subscale (r = .30, p < .001). Radical dualism was significantly correlated with sexuality awareness, as measured by the Sexual Monitoring subscale (r = -.17, p = .005). Dualism was not found to be significantly correlated with the measures of somatization, or difficulties in emotional awareness.

# **Regression Analyses**

In order to understand the relationship between radical dualism and the body attitudes and experiences as a group, a series of multiple regressions was run, using radical dualism as the dependent variable and including each of the outcome variables as independent variables. Results are shown in Tables 4, 5, and 6.

Table 4

All Outcome Measures as Predictors of Dualism

Variable	β	р	$\Delta R^2$	F	р
Dualism					
Step 1			.16	2.47	.00
BASS	.00	.99			
BE-APP	.23	.02			
BAS	19	.11			
OBCS-SRV	03	.75			
OBCS-SHM	.16	.09			
<b>BIGSS-SHM</b>	09	.37			
<b>BIGSS-GLT</b>	.11	.19			
DEP	.07	.40			
SOM	.10	.20			
BAQ	.00	.97			
BEQ-ALN	.23	.01			
BEQ-HARM	.03	.76			
SEXCON	03	.71			
SEXMON	07	.35			
DERS-AWR	05	.53			
DERS-CLR	.11	.18			

Note. BASS = Body Areas Satisfaction Subscale; BE-APP = Body Esteem Scale-Appearance Subscale; BAS = Body Appreciation Scale; OBCS-SRV = Objectified Body Consciousness- Surveillance Subscale; OBCS-SHM = Objectified Body Consciousness- Shame Subscale; BIGSS-SHM = Body Image Guilt and Shame Scale- Shame; BIGSS-GLT = Body Image Guilt and Shame Scale- Guilt; DEP = Cambridge Depersonalization Scale; SOM = Four Dimensional Symptom Questionnaire; BAQ = Body Awareness Questionnaire; BEQ-ALN = Body Experience Questionnaire- Alienation; BEQ-HRM = Body Experience Questionnaire- Harmony; DERS-AWR = Difficulties in Emotion Regulation-Awareness; DERS-CLR = Difficulties in Emotion Regulation- Clarity; SEXCON = Sexual Consciousness Subscale; SEXMON = Sexual Monitoring Subscale.

Table 5

All Body Attitude Measures as Predictors of Dualism

Variable	β	p	$\Delta R^2$	F	p
Dualism					
Step 1			.10	3.56	.001
BASS	.02	.83			
BE-APP	.18	.05			
BAS	25	.02			
OBCS-SRV	02	.80			
OBCS-SHM	.19	.03			
<b>BIGSS-SHM</b>	02	.86			
BIGSS-GLT	.06	.42			

Note. BASS = Body Areas Satisfaction Subscale; BE-APP = Body Esteem Scale-Appearance Subscale; BAS = Body Appreciation Scale; OBCS-SRV = Objectified Body Consciousness- Surveillance Subscale; OBCS-SHM = Objectified Body Consciousness- Shame Subscale; BIGSS-SHM = Body Image Guilt and Shame Scale- Shame; BIGSS-GLT = Body Image Guilt and Shame Scale- Guilt

In the first regression, all outcome variables were included and were found to account for 16% of the variance in radical dualism ( $\Delta R^2$  = .16). In the second regression, only body attitude variables were used as the independent variables and were found to account for 10% of the total variance in radical dualism ( $\Delta R^2$  = .10). In the third regression, body experiences were used as the independent variables and were found to account for 11% of the total variance in radical dualism ( $\Delta R^2$  = .11).

Table 6

All Body Experience Measures as Predictors of Dualism

Variable	β	р	$\Delta R^2$	F	р
Dualism					
Step 1			.11	2.98	.002
DEP	.06	.42			
SOM	.08	.26			
BAQ	.02	.84			
BEQ-ALN	.27	.001			
BEQ-HARM	04	.59			
SEXCON	00	.96			
SEXMON	08	.23			
<b>DERS-AWR</b>	05	.56			
DERS-CLR	.08	.28			

DEP = Cambridge Depersonalization Scale; SOM = Four Dimensional Symptom Questionnaire; BAQ = Body Awareness Questionnaire; BEQ-ALN = Body Experience Questionnaire- Alienation; BEQ-HRM = Body Experience Questionnaire- Harmony; DERS-AWR = Difficulties in Emotion Regulation-Awareness; DERS-CLR = Difficulties in Emotion Regulation- Clarity; SEXCON = Sexual Consciousness Subscale; SEXMON = Sexual Monitoring Subscale.

## **Second Hypothesis**

Second, it was hypothesized that sanctification would be positively correlated with the attitude of body satisfaction, negatively correlated with the attitudes of body objectification, body guilt and shame, negatively correlated with the experiences of depersonalization, somatization, and difficulty in emotion awareness, and positively correlated with the experiences of internal

body awareness and sexuality awareness. This hypothesis was partially supported; out of 16 total analyses run, 3 were significant.

In order to avoid the high likelihood of a Type 1 error due to running multiple correlation analyses, a series of hierarchical regressions was run to see if sanctification would significantly predict the outcome variables. Due to the overlap of several items on the three sanctification scales, items on the Christian Teachings on the Body Scale that duplicated those on the Sacred Qualities of the Body Scale and the Manifestation of God in the Body Scale were removed from those scales prior to running the analyses. The adjusted sanctification scales were then used for testing this hypothesis. The three measures of sanctification (Sacred Qualities of the Body Scale, the Manifestation of God in the Body Scale, and the Christian Teachings on the Body Scale) were entered as the independent variable and each outcome measure of either body attitudes or body experiences (Body Areas Satisfaction Subscale, Body Esteem-Appearance Subscale, Body Appreciation Scale, Objectified Body Consciousness-Body Surveillance Subscale, Objectified Body Consciousness-Body Shame Subscale, Body Image Guilt and Shame Scale-Guilt Subscale, Body Image Guilt and Shame Scale-Shame Subscale, Difficulties in Emotion Regulation-Awareness Subscale, Difficulties in Emotion Regulation-Clarity Subscale, Cambridge Depersonalization Scale, Four

Dimensional Symptom Questionnaire, Body Awareness Questionnaire, Body Experience Scale- Harmony Subscale, Body Experience Scale- Alienation Subscale, and the Sexual Consciousness Subscale and Sexual Monitoring Subscale) was entered as the dependent variable. Results are shown in Tables 7 (attitudes) and 8 (experiences). Bonferroni corrections were calculated by dividing .05 by the number of total analyses run, seven for body attitudes and nine for body experiences. The resulting cutoff values were p < .007 for body attitudes and p < .006 for body experiences.

## **Body Attitudes**

Sanctification significantly predicted body satisfaction as measured by the Body Appreciation Scale ( $\beta$  = .35, p < .001). Sanctification did not significantly predict body objectification, body shame, or body guilt.

Sanctification as a Predictor of all Body Attitude Measures

Table 7

Variable	β	р	$\Delta R^2$	F	p
Body Areas Satisfaction Subs	ecala				
Step 1	scure		.07	5.64	.00
SQ SQ	.06	.42	.07	5.04	.00
MGBS	.00	. <del>4</del> 2 .91			
XNTB	.22	.01			
Body Esteem-Appearance					
Step 1			.03	2.19	.09
SQ	01	.85	.00	>	.07
MGBS	02	.83			
XNTB	.18	.04			
74.12	,10				
Body Appreciation Scale					
Step 1			.11	9.77	.00
SQ SQ	.05	.51	•11	<i>3.77</i>	.00
MGBS	06	.45			
XNTB	.35	.000			
ANID	.33	.000			
Objectified Body Consciousn	000- S1187101	illance			
Step 1	C33- JUI VEI	HILLE	.02	1.29	.28
-	.00	1.00	.02	1.29	.40
SQ					
MGBS	13	.16			
XNTB	00	.98			

*Note.* SQ = Sacred Qualities of the Body; MGBS = Manifestation of God in the Body; XNTB = Christian Teachings on the Body.

Table 7 (continued)

Sanctification as a Predictor of all Body Attitude Measures

Variable	β	p	$\Delta R^2$	F	р
Objectified Body Conscious	ness- Shame				
Step 1			.04	3.23	.02
SQ	.06	.47			
MGBS	.02	.82			
XNTB	23	.01			
Body Image Guilt and Shar	ne- Shame				
Step 1			.03	2.50	.06
SQ	01	.92			
MGBS	17	.05			
XNTB	.00	.97			
Body Image Guilt and Shar	ne- Guilt				
Step 1			.00	.20	.90
Sanctification	.05	.50			
MGBS	05	.60			
XNTB	.00	.97			

*Note.* SQ = Sacred Qualities of the Body; MGBS = Manifestation of God in the Body; XNTB = Christian Teachings on the Body.

Table 8

Sanctification as a Predictor of all Body Experience Measures

V	ariable	β	р	$\Delta R^2$	F	р
_						
Deperson	alization					
Step 1				.07	5.79	.00
	Sanctification	.14	.07			
	MGBS	11	.24			
	XNTB	23	.01			
Somatiza	tion					
Step 1	, 1011			.03	2.39	.07
•	Sanctification	.12	.11			
	MGBS	.03	.76			
	XNTB	.06	.55			
Dada Asa	auguses Ougstionnai	***				
v	areness Questionnai	re		.09	7.10	.00
Step 1	CO	02	<b>(</b> F	.09	7.10	.00
	SQ	.03	.65			
	MGBS	.17	.06			
	XNTB	.14	.13			
Body Exp	erience- Alienation					
Step 1				.11	9.19	.00
•	SQ	01	.86			
	MGBS	07	.43			
	XNTB	28	.002			

*Note.* SQ = Sacred Qualities of the Body; MGBS = Manifestation of God in the Body; XNTB = Christian Teachings on the Body.

Table 8 (continued)

Sanctification as a Predictor of all Body Experience Measures

Variable	β	р	$\Delta R^2$	F	р
D 1 F ' II					
Body Experience- Harmon	iy		4.4	0.04	22
Step 1			.11	8.84	.00
SQ	11	.14			
MGBS	.01	.96			
XNTB	.37	.000			
Difficulties in Emotion De	oulation Age	2242422			
Difficulties in Emotion Re	guiuiion- Aa	ureness	00	( (0	00
Step 1	00	01	.08	6.68	.00
SQ	.08	.31			
MGBS	17	.05			
XNTB	19	.03			
Difficulties in Emotion De	oulation Cla	ari ta c			
Difficulties in Emotion Re	guiuiion- Cia	riiy	.09	7.14	00
Step 1	01	00	.09	7.14	.00
SQ	.01	.89			
MGBS	08	.40			
XNTB	21	.02			
Sexual Consciousness Sub	scale				
Step 1			.06	4.66	.00
SQ	09	.23			
MGBS	.10	.27			
XNTB	.20	.03			

*Note.* SQ = Sacred Qualities of the Body; MGBS = Manifestation of God in the Body; XNTB = Christian Teachings on the Body.

### **Body Experiences**

Sanctification also predicted internal body awareness as measured by the Body Experience Questionnaire-Alienation subscale ( $\beta$  = -.28, p < .002) and the Body Experience Questionnaire-Harmony subscale ( $\beta$  = .37, p < .001). In each case listed above, the Christian Teachings on the Body Scale accounted for the overall significance of the regression. Sanctification did not significantly predict depersonalization, somatization, lack of emotion awareness, or sexuality awareness.

# Third Hypothesis

Third, it was hypothesized that gender would moderate the relationship between the attitudes of radical dualism and sanctification and the outcome measures. This hypothesis was only partially supported; out of 64 analyses run, one was significant. First, the measures of radical dualism and sanctification were centered. Interaction terms were created by multiplying gender with the centered measures of radical dualism and sanctification. Next a series of hierarchical regressions was run, with gender and the centered measure of either radical dualism or sanctification entered into the first block and the interaction term entered into the second block. In each series of regressions, the outcome

measures of either body attitudes or body experiences were entered individually as the dependent variables. All results are depicted in Tables 9 and 10 for dualism and Tables 11-16 for sanctification.

Table 9

Gender as a Moderator between Dualism and Body Attitude Measures

Variable	β	р	$\Delta R^2$	F	р
Body Areas Satisfaction Sub	ucaala				
· ·	scuie		.04	4.65	.01
Step 1 Gender	14	.04	.04	4.03	.01
Dualism	14 15	.03			
	13	.00	.42	.52	
Step 2 Gender	1.4		.42	.32	
Gender Dualism	14	.03			
	86	.45			
GenXDual	07	.52			
D 1 E ( )					
Body Esteem-Appearance			0.0	2 2 <b>-</b>	2.2
Step 1		0.0	.08	8.97	.00
Gender	27	.00			
Dualism	06	.36			
Step 2			.00	.75	.39
Gender	27	.00			
Dualism	.02	.87			
GenXDual	10	.39			
Body Appreciation Scale					
Step 1			.09	11.01	.00
Gender	17	.01			
Dualism	25	.00			
Step 2			.01	2.97	.09
Gender	18	.01			
Dualism	10	.39			
GenXDual	19	.09			

*Note.* GenXDual = Interaction term of Gender X Dualism.

Table 9 (continued)

Gender as a Moderator between Dualism and Body Attitude Measures

Variable	β	р	$\Delta R^2$	F	р
Objectified Pody Comocion	uorano Caurroi	11 au co			
Objectified Body Conscion	isness- Surveii	lunce	07	0.17	00
Step 1	0.4	00	.07	8.16	.00
Gender	.24	.00			
Dualism	.12	.08			
Step 2			.00	.21	.65
Gender	.24	.00			
Dualism	.16	.16			
GenXDual	05	.65			
Objectified Body Consciou	ısness- Shame				
Step 1			.11	13.19	.00
Gender	.20	.00			
Dualism	.26	.00			
Step 2			.00	.17	.68
Gender	.20	.00			
Dualism	.22	.04			
GenXDual	.05	.68			
Body Image Guilt and Sh	ame Scale- Sha	те			
Step 1			.14	17.19	.00
Gender	.33	.00			
Dualism	.16	.53			
Step 2			.03	6.73	.01
Gender	.34	.00			
Dualism	07	.53			
GenXDual	.27	.01			

*Note.* GenXDual = Interaction term of Gender X Dualism.

Table 9 (continued)

Gender as a Moderator between Dualism and Body Attitude Measures

Variable	β	р	$\Delta R^2$	F	р
Body Image Guilt and Sham	ıe- Guilt				
Step 1			.08	9.29	.00
Gender	.27	.00			
Dualism	.09	.17			
Step 2			.00	.03	.86
Gender	.27	.00			
Dualism	.10	.35			
GenXDual	02	.86			

*Note.* GenXDual = Interaction term of Gender X Dualism.

Table 10

Gender as a Moderator between Dualism and Body Experience Measures

Variable	β	р	$\Delta R^2$	F	р
Depersonalization					
Step 1			.04	3.97	.02
Gender	.01	.93			
Dualism	.19	.01			
Step 2			.00	.04	.84
Gender	.01	.93			
Dualism	.17	.14			
GenXDual	.02	.84			
Somatization					
Step 1			.01	.94	.39
Gender	07	.30			
Dualism	06	.37			
Step 2			.01	1.00	.32
Gender	07	.29			
Dualism	03	.78			
GenXDual	12	.32			
Body Awareness Question	nnaire				
Step 1			.04	4.30	.02
Gender	.19	.00			
Dualism	04	.59			
Step 2			.00	.39	.53
Gender	.19	.00			
Dualism	09	.41			
GenXDual	.07	.53			

*Note.* GenXDual = Interaction term of Gender X Dualism.

Table 10 (continued)

Gender as a Moderator between Dualism and Body Experience Measures

Variable	β	р	$\Delta R^2$	F	р
Body Experience Question	naire-Alienat	ion			
Step 1			.09	11.14	.00
Gender	.06	.40			
Dualism	.30	.00			
Step 2			.01	1.18	.28
Gender	.06	.38			
Dualism	.20	.07			
GenXDual	.12	.28			
Body Experience Question	naire- Harmo	пу			
Step 1		Ü	.02	2.40	.09
Gender	10	.13			
Dualism	.11	.12			
Step 2			.01	2.69	.10
Gender	11	.12			
Dualism	.26	.03			
GenXDual	19	.10			
Difficulties in Emotion Reg	gulation- Aw	areness			
Step 1	•		.05	5.26	.06
Gender	21	.00			
Dualism	.03	.64			
Step 2			.00	.27	.60
Gender	21	.00		-	
Dualism	.08	.49			
GenXDual	06	.60			

*Note.* GenXDual = Interaction term of Gender X Dualism.

Table 10 (continued)

Gender as a Moderator between Dualism and Body Experience Measures

Variable	β	р	$\Delta R^2$	F	р
D:((: 10: 1 E D	1 01	.,			
Difficulties in Emotion Re	egulation- Clai	rity	0.5		
Step 1			.02	2.24	.11
Gender	06	.41			
Dualism	.13	.05			
Step 2			.00	.80	.37
Gender	06	.40			
Dualism	.21	.06			
GenXDual	10	.37			
Sexual Consciousness Sul	bscale				
Step 1			.06	7.38	.00
Gender	.25	.00			
Dualism	.02	.80			
Step 2			.00	.10	.78
Gender	.25	.00			
Dualism	.05	.69			
GenXDual	04	.76			
Sexual Monitoring Subsc	ale				
Step 1			.03	3.46	.03
Gender	.04	.54			
Dualism	17	.01			
Step 2			.01	1.40	.24
Gender	.04	.52			
Dualism	28	.02			
GenXDual	.14	.24			

*Note.* GenXDual = Interaction term of Gender X Dualism.

Table 11

Gender as a Moderator Between Sanctification and Body Attitude Measures

Variable	β	р	$\Delta R^2$	F	р
Padu Arago Catiofaction	Subscala				
Body Areas Satisfaction S	ouoscuie		.07	8.09	.00
Step 1	17	02	.07	0.09	.00
Gender	16	.02			
SQ	.22	.01	00		20
Step 2		0.0	.00	.77	.38
Gender	16	.02			
SQ	.33	.02			
GenXSQ	13	.38			
Body Esteem-Appearance					
Step 1			.09	10.03	.00
Gender	28	.00			
SQ	06	.10			
Step 2			.00	.18	.67
Gender	27	.00			
SQ	.06	.70			
GenXSQ	.06	.67			
~					
Body Appreciation Scale					
Step 1			.10	12.39	.00
Gender	19	.00			
SQ	.27	.00			
Step 2			.00	.01	.92
Gender	19	.00			
SQ	.26	.07			
GenXSQ	.01	.92			

*Note.* SQ = Sacred Qualities of the Body; GenXSQ = Interaction term of Gender X Sacred Qualities of the Body.

Table 11 (continued)

Gender as a Moderator Between Sanctification and Body Attitude Measures

Variable	β	p	$\Delta R^2$	F	р
Objectified Body Conscio	MICHACC CILY7701	llanca			
, ,	iusiiess- Suiveii	unce	.06	7.30	.00
Step 1 Gender	.24	.00	.00	7.50	.00
	.24 08				
SQ Star 2	08	.08	02	2.77	٥٣
Step 2	22	00	.02	3.77	.05
Gender	.23	.00			
SQ	.17	.25			
GenXSQ	28	.05			
O1: 1:0: 1 P 1 C :	CI				
Objectified Body Conscio	ousness- Sname		06	<i>(</i> 45	00
Step 1			.06	6.45	.00
Gender	.21	.00			
SQ	12	.00			
	12	.00	.01	1 24	25
Step 2 Gender	.21	.00	.01	1.34	.25
SQ	.03	.84			
GenXSQ	17	.25			
Body Image Guilt and Sl	ıame Scale- Sha	те			
Step 1			.13	15.98	.00
Gender	.34	.00			
SQ	13	.05			
Step 2			.00	1.10	.30
Gender	.35	.00			
SQ	26	.07			
GenXSQ	.15	.30			

Note. SQ = Sacred Qualities of the Body; GenXSQ = Interaction term of Gender X Sacred Qualities of the Body. (table continues)

Table 11 (continued)

Gender as a Moderator Between Sanctification and Body Attitude Measures

Variable	β	р	$\Delta R^2$	F	р
Padu Imaga Chilt and Cla	ama Cuilt				
Body Image Guilt and Sh	ume-Guiii				
Step 1			.07	8.59	.00
Gender	.26	.00			
SQ	.05	.43			
Step 2			.01	2.50	.12
Gender	.27	.00			
SQ	15	.30			
GenXSQ	.23	.12			

*Note.* SQ = Sacred Qualities of the Body; GenXSQ = Interaction term of Gender X Sacred Qualities of the Body.

Table 12

Gender as a Moderator Between Sanctification and Body Experience Measures

Variable	β	р	$\Delta R^2$	F	р
Depersonalization					
Step 1			.00	.45	.64
Gender	.01	.87			
SQ	06	.35			
Step 2			.00	.08	.77
Gender	.01	.89			
SQ	03	.86			
GenXSQ	04	.77			
Somatization					
Step 1			.00	.26	.77
Gender	.04	.58			
SQ	.03	.67			
Step 2			.01	1.47	.23
Gender	.05	.51			
SQ	13	.38			
GenXSQ	.18	.23			
Body Awareness Questic	nnaire				
Step 1			.08	9.92	.00
Gender	.18	.01			
SQ	.22	.00			
Step 2			.00	.09	.77
Gender	.18	.01			
SQ	.26	.08			
GenXSQ	04	.77			

*Note.* SQ = Sacred Qualities of the Body; GenXSQ = Interaction term of Gender X Sacred Qualities of the Body.

Table 12 (continued)

Gender as a Moderator Between Sanctification and Body Experience Measures

Variable	β	р	$\Delta R^2$	F	р
Body Experience Question	onnaire-Alienat	ion			
Step 1			.07	7.62	.00
Gender	.07	.27	.07	7.02	•••
SQ	25	.00			
Step 2	0	.00	.00	.18	.68
Gender	.07	.29	.00	.10	.00
SQ	20	.17			
GenXSQ	06	.68			
Body Experience Question	onnaire- Harmo	пу			
Step 1			.04	4.54	.01
Gender	10	.17			
SQ	17	.01			
Step 2			.00	.42	.52
Gender	10	.16			
SQ	.09	.55			
GenXSQ	10	.52			
Difficulties in Emotion I	Regulation- Aw	areness			
Step 1	J		.07	7.84	.00
Gender	20	.00			
SQ	15	.02			
Step 2			.02	3.53	.06
Gender	19	.00			
SQ	39	.01			
GenXSQ	.27	.06			

*Note.* SQ = Sacred Qualities of the Body; GenXSQ = Interaction term of Gender X Sacred Qualities of the Body.

Table 12 (continued)

Gender as a Moderator Between Sanctification and Body Experience Measures

Variable	β	р	$\Delta R^2$	F	р
Difficulties in Emotion I	Pagulation Clar	vita i			
Step 1	Reguiuiion-Ciui	iiy	.04	4.17	.02
Gender	04	.52	.04	4.17	.02
SQ	18	.01	01	2.20	10
Step 2	02	(1	.01	2.29	.13
Gender	03	.61			
SQ	38	.01			
GenXSQ	.22	.13			
Sexual Consciousness Si	ıbscale				
Step 1			.08	8.85	.00
Gender	.26	.00			
SQ	11	.10			
Step 2			.00	.30	.58
Gender	.26	.00			
SQ	04	.78			
GenXSQ	08	.58			
- <del></del>					
Sexual Monitoring Subs	cale				
Step 1			.00	.26	.77
Gender	.04	.58			
SQ	.03	.67			
Step 2			.01	1.47	.23
Gender	.05	.51			
SQ	13	.38			
GenXSQ	.18	.23			

Note. SQ = Sacred Qualities of the Body; GenXSQ = Interaction term of Gender X Sacred Qualities of the Body.

Table 13

Gender as a Moderator Between Sanctification and Body Attitude Measures

Variable	β	р	$\Delta R^2$	F	р
Body Areas Satisfaction Sul	oscale				
Step 1			.07	7.85	.00
Gender	17	.01			
MGBS	22	.00			
Step 2			.00	.36	.55
Gender	17	.01			
MGBS	29	.03			
GenXMGBS	.08	.55			
Body Esteem-Appearance					
Step 1			.09	10.99	.00
Gender	29	.00			
MGBS	14	.33			
Step 2			.00	.01	.90
Gender	29	.00			
MGBS	15	.23			
GenXMGBS	.02	.90			
Body Appreciation Scale					
Step 1			.09	10.15	.00
Gender	20	.00			
MGBS	24	.00			
Step 2			.00	.41	.52
Gender	20	.00			
MGBS	17	.20			
GenXMGBS	09	.52			

*Note.* MGBS = Manifestation of God in the Body Scale; GenXMGBS = Interaction term of Gender X Manifestation of God in the Body Scale.

Table 13 (continued)

Gender as a Moderator Between Sanctification and Body Attitude Measures

Variable	β	р	$\Delta R^2$	F	р
O1: ('C' 1P 1 C '	<i>C</i>	11			
Objectified Body Conscious	sness- Surveil	llance	2=	0.70	0.0
Step 1			.07	8.63	.00
Gender	.25	.00			
MGBS	.13	.04			
Step 2			.00	.71	.40
Gender	.25	.00			
MGBS	.04	.76			
GenXMGBS	.11	.45			
Objectified Body Conscious	sness- Shame				
Step 1			.06	7.25	.00
Gender	.22	.00			
MGBS	.15	.03			
Step 2			.00	.32	.57
Gender	.22	.00			
MGBS	.08	.52			
GenXMGBS	.07	.57			
Body Image Guilt and Shar	me Scale- Sha	ıme			
Step 1			.15	19.58	.00
Gender	.36	.00			
MGBS	.20	.00			
Step 2			.00	.23	.64
Gender	.35	.00			
MGBS	.15	.22			
GenXMGBS	.06	.64			

*Note.* MGBS = Manifestation of God in the Body Scale; GenXMGBS = Interaction term of Gender X Manifestation of God in the Body Scale.

Table 13 (continued)

Gender as a Moderator Between Sanctification and Body Attitude Measures

Variable	β	р	$\Delta R^2$	F	р
Body Image Guilt and Shan	1e- Guilt				
Step 1			.07	8.65	.00
Gender	.27	.00			
MGBS	.06	.39			
Step 2			.00	.52	.47
Gender	.28	.00			
MGBS	.14	.29			
GenXMGBS	09	.47			

*Note.* MGBS = Manifestation of God in the Body Scale; GenXMGBS = Interaction term of Gender X Manifestation of God in the Body Scale.

Table 14

Gender as a Moderator Between Sanctification and Body Experience Measures

Variable	β	р	$\Delta R^2$	F	р
Depersonalization					
Step 1			.05	5.29	.01
Gender	.03	.65			
MGBS	.22	.00			
Step 2			.00	.07	.79
Gender	.03	.67			
MGBS	.19	.15			
GenXMGBS	.03	.79			
Somatization					
Step 1			.02	2.70	.07
Gender	09	.21			
MGBS	14	.04			
Step 2			.01	2.28	.13
Gender	08	.26			
MGBS	.03	.82			
GenXMGBS	20	.13			
Body Awareness Question	naire				
Step 1			.10	12.42	.00
Gender	.16	.01			
MGBS	26	.00			
Step 2			.01	1.17	.28
Gender	.17	.01			
MGBS	14	.27			
GenXMGBS	14	.28			

*Note.* MGBS = Manifestation of God in the Body Scale; GenXMGBS = Interaction term of Gender X Manifestation of God in the Body Scale.

Table 14 (continued)

Gender as a Moderator Between Sanctification and Body Experience Measures

Variable	β	р	$\Delta R^2$	F	р
Body Experience Question	naire-Alienat	ion			
Step 1			.09	10.61	.00
Gender	.09	.18			
MGBS	.30	.00			
Step 2			.00	.32	.57
Gender	.09	.20			
MGBS	.23	.07			
GenXMGBS	.07	.57			
Body Experience Question	naire- Harmo	ny			
Step 1			.06	6.66	.00
Gender	.08	.24			
MGBS	22	.00			
Step 2			.01	1.46	.23
Gender	.09	.20			
MGBS	09	.51			
GenXMGBS	16	.23			
Difficulties in Emotion Re	gulation- Aw	areness			
Step 1	3		.10	12.70	.00
Gender	19	.00	-		
MGBS	25	.00			
Step 2			.00	.24	.63
Gender	19	.00			
MGBS	19	.13			
GenXMGBS	.06	.63			

*Note.* MGBS = Manifestation of God in the Body Scale; GenXMGBS = Interaction term of Gender X Manifestation of God in the Body Scale.

Table 14 (continued)

Gender as a Moderator Between Sanctification and Body Experience Measures

Variable	β	р	$\Delta R^2$	F	р
Difficulties in Emotion Re	oulation- Cla	ritu			
Step 1	3 mm on Cm	iig	.04	4.96	.01
Gender	03	.62	.01	1.70	.01
MGBS	20	.00			
Step 2	.20	.00	.00	.12	.73
Gender	04	.60	.00	.12	.70
MGBS	16	.21			
GenXMGBS	.05	.73			
GCIDAMODO	.00	.70			
Sexual Consciousness Sub	cala				
Step 1	scure		.12	14.21	.00
Gender	28	.00	.12	14.21	.00
MGBS	23	.00			
	23	.00	.01	1.41	.24
Step 2	27	00	.01	1.41	.24
Gender	27	.00			
MGBS	11	.41			
GenXMGBS	15	.24			
C 1 M 1 C 1	.1.				
Sexual Monitoring Subsca	ue		01	1.20	20
Step 1	02	<b>(</b> 7	.01	1.29	.28
Gender	.03	.67			
MGBS	10	.14	00	27	= 4
Step 2	0.0	40	.00	.37	.54
Gender	.03	.63			
MGBS	03	.81			
GenXMGBS	08	.54			

*Note.* MGBS = Manifestation of God in the Body Scale; GenXMGBS = Interaction term of Gender X Manifestation of God in the Body Scale.

Table 15

Gender as a Moderator Between Sanctification and Body Attitude Measures

Variable	β	р	$\Delta R^2$	F	р
Body Areas Satisfaction Sub	scale				
Step 1			.09	10.85	.00
Gender	16	.01			
XNTB	27	.00			
Step 2			.01	1.48	.23
Gender	16	.02			
XNTB	13	.30			
GenXXNTB	16	.23			
Body Esteem-Appearance					
Step 1			.11	13.10	.00
Gender	29	.00			
XNTB	19	.00			
Step 2			.00	.10	.32
Gender	28	.00		,_,	
XNTB	08	.54			
GenX XNTB	13	.32			
Body Appreciation Scale					
Step 1			.15	19.10	.00
Gender	20	.00	.10	17.10	.00
XNTB	35	.00			
Step 2	.00	.00	.01	1.37	.24
Gender	20	.00	.01	1.07	1
XNTB	22	.08			
GenX XNTB	22 14	.24			
	,1T	,44			

*Note.* XNTB = Christian Teachings on the Body Scale; GenXXNTB = Interaction term of Gender X Christian Teachings on the Body Scale.

Table 15 (continued)

Gender as a Moderator Between Sanctification and Body Attitude Measures

Variable	β	р	$\Delta R^2$	F	р
Objectified Body Conscious		llance			
Step 1	nicos Surven	unice	.07	7.88	.00
Gender	.25	.00	.07	7.00	.00
XNTB	.11	.10			
Step 2	.11	.10	.00	.07	.79
Gender	.25	.00	.00	.07	.19
XNTB	.08	.55			
GenX XNTB	.08	.55 .79			
Gena and	.04	./9			
01: ('C' 1D 1 0 '	01				
Objectified Body Conscious	ness- Shame		00	40.40	0.0
Step 1		0.0	.09	10.19	.00
Gender	.22	.00			
XNTB	.21	.03			
Step 2			.01	1.44	.23
Gender	.22	.00			
XNTB	.08	.52			
GenX XNTB	.15	.23			
Body Image Guilt and Shar	ne Scale- Sha	ıme			
Step 1			.13	16.77	.00
Gender	.35	.00			
XNTB	.15	.02			
Step 2			.00	.50	.48
Gender	.34	.00			
XNTB	.07	.58			
GenX XNTB	.09	.48			

*Note.* XNTB = Christian Teachings on the Body Scale; GenXXNTB = Interaction term of Gender X Christian Teachings on the Body Scale.

Table 15 (continued)

Gender as a Moderator Between Sanctification and Body Attitude Measures

Variable	β	р	$\Delta R^2$	F	р
Body Image Guilt and Shan	ıe- Guilt				
Step 1			.07	8.37	.00
Gender	.27	.00			
XNTB	.03	.70			
Step 2			.00	.00	.99
Gender	.27	.00			
XNTB	.02	.86			
GenX XNTB	.00	.99			

*Note.* XNTB = Christian Teachings on the Body Scale; GenXXNTB = Interaction term of Gender X Christian Teachings on the Body Scale.

Table 16

Gender as a Moderator Between Sanctification and Body Experience Measures

Variable	β	р	$\Delta R^2$	F	р
Depersonalization					
Step 1			.06	6.52	.00
Gender	.03	.68	.00	0.02	.00
XNTB	.24	.00			
Step 2	· <b>-</b> 1	.00	.01	1.38	.24
Gender	.02	.76	.01	1.00	1
XNTB	.11	.42			
GenX XNTB	.15	.24			
	.10				
Somatization					
Step 1			.03	2.76	.07
Gender	08	.22	.00	2.70	.07
XNTB	14	.04			
Step 2	.11	.01	.05	10.70	.00
Gender	06	.34	.00	10.70	.00
XNTB	.22	.09			
GenX XNTB	42	.00			
Celbertarib	• • • •	.00			
Body Awareness Question	naire				
Step 1			.10	11.91	.00
Gender	.17	.01	.10	11./1	.00
XNTB	25	.00			
Step 2		.00	.00	.00	.99
Gender	.17	.01	.00	•00	• > >
XNTB	25	.05			
GenX XNTB	00	.99			

*Note.* XNTB = Christian Teachings on the Body Scale; GenXXNTB = Interaction term of Gender X Christian Teachings on the Body Scale.

Table 16 (continued)

Gender as a Moderator Between Sanctification and Body Experience Measures

Variable	β	р	$\Delta R^2$	F	р
D. J. F O		·			
Body Experience Question	nuire-Aiienut	ion	10	14.20	00
Step 1	00	10	.12	14.28	.00
Gender	.09	.18			
XNTB	.34	.00	0.4	o	4.4
Step 2			.01	2.17	.14
Gender	.08	.23			
XNTB	.18	.16			
GenX XNTB	.19	.14			
Body Experience Question	naire- Harmo	пу			
Step 1			.11	12.71	.00
Gender	.08	.24			
XNTB	31	.00			
Step 2			.01	1.29	.26
Gender	.09	.21			
XNTB	19	.15			
GenX XNTB	14	.26			
Difficulties in Emotion Reg	oulation- Azn	กาอทอรร			
Step 1	<i>Summon</i> 2100	<i>ai ciic</i> 55	.11	12.93	.00
Gender	19	.00	,11	12.70	.00
XNTB	19 25	.00			
	20	.00	00	0.4	02
Step 2	10	00	.00	.04	.83
Gender	19	.00			
XNTB	22	.08			
GenX XNTB	.03	.83			

*Note.* XNTB = Christian Teachings on the Body Scale; GenXXNTB = Interaction term of Gender X Christian Teachings on the Body Scale.

Table 16 (continued)

Gender as a Moderator Between Sanctification and Body Experience Measures

β	р	$\Delta R^2$	F	р
oulation- Clas	ritu			
guiution Ciu	iiy	07	7.83	.00
- 03	61	.07	7.00	.00
.20	.00	00	50	.48
- 03	66	.00	.50	.10
•••	• • • •			
scale				
эсигс		12	15 33	.00
- 27	00	.12	10.00	.00
.20	.00	00	12	.73
- 27	00	.00	.12	.70
.01	.,,			
10				
,,,		03	2 98	.05
03	70	.00	2.70	.00
.10	.02	00	0.14	.71
03	67	.00	0.13	./ 1
	•	03 .61 25 .00 03 .66 33 .01 09 .48 27 .00 25 .00 25 .00 21 .10 04 .73 04 .73	gulation- Clarity  .07 03	Scale  .07  .07  7.83 03  .61 25  .00  .00  .00  .50 03  .66 33  .01 09  .48   .12  .15.33 27  .00 25  .00  .00  .12 27  .00 21  .10 04  .73   le  .03  .70 16  .02  .00  .014  .03  .67 12  .38

*Note.* XNTB = Christian Teachings on the Body Scale; GenXXNTB = Interaction term of Gender X Christian Teachings on the Body Scale.

Bonferroni corrections were calculated by dividing .05 by seven (body attitudes) and nine (body experiences), the number of analyses run with each measure of radical dualism or sanctification. The resulting cutoff values were p < .007 for body attitudes and p < .006 for body experiences.

#### **Body Attitudes**

Gender did not significantly moderate the relationship between any of the measures of radical dualism or sanctification and the measures of body satisfaction, body objectification, body guilt, or body shame.

## **Body Experiences**

Gender was found to moderate the relationship between sanctification, as measured by the Christian Teachings on the Body Scale, and the measure of somatization ( $\beta$  = -.42, p = .001). Results are displayed in Figure 1. Men who reported higher levels of sanctification also reported higher levels of somatization, whereas women who reported higher levels of sanctification reported lower levels of somatization. Gender did not significantly moderate the relationship between any of the measures of radical dualism or sanctification and the measures of depersonalization, internal body awareness, emotion awareness, or sexuality awareness.

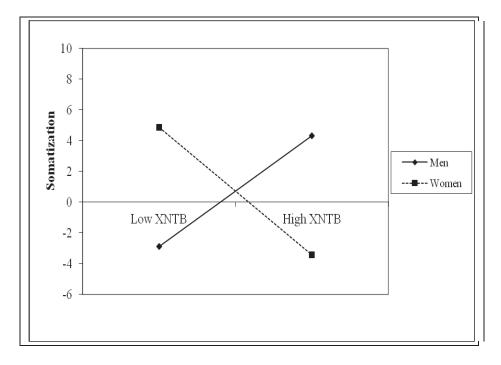


Figure 1. Interaction Between Christian Teachings on the Body and Somatization with Gender as a Moderator.

#### **Post-Hoc Analyses**

Post-hoc analyses were conducted on the third hypothesis in order to further explore how men and women may differ in their experiences of somatization. A series of independent samples t-tests was run on the 16 items of the somatization scale in order to assess for potential differences between genders. A Bonferroni correction was calculated by dividing .05 by 16, resulting in a cutoff value of p < .003. Results are shown in Table 17. A significant difference, t(176.25) = -3.87, p < .001, was found between men and women on item 9, During the past week, did you suffer from a bloated feeling in the abdomen? Women

(M = 1.62, SD = .77) reported higher levels of a bloated feeling in their abdomen than men (M = 1.28, SD = .52).

Table 17

Types of Somatization Experienced by Men and Women

	Item	Gender	t	df	
	Men	Women			
1	1.20	1.24	-2.95	156.77	
	(.48)	(.64)			
2	2.06	1.84	1.54	219	
	(1.07)	(.93)			
3	1.00	1.00			
	(.00)	(.00)			
4	1.75	1.77	10	219	
	(.92)	(1.04)			
5	1.89	1.89	.00	220	
	(.97)	(1.07)			
6	1.22	1.25	42	220	
	(.57)	(.67)			
7	1.09	1.13	62	216	
	(.39)	(.39)			
8	1.72	1.84	91	219	
	(.82)	(.89)			
9	1.28	1.62	-3.87*	176.25	
	(.52)	(.77)			
10	1.14	1.22	-1.32	176.89	
	(.35)	(.52)			
11	1.15	1.18	33	220	
	(.40)	(.54)			
12	1.42	1.56	-1.24	219	
	(.73)	(.80)			

*Note.* \* p < .003.

## **Fourth Hypothesis**

It was further hypothesized that gender would moderate the relationship between age and sexual awareness. This was partially supported; out of two analyses run, one was significant. First, age was centered. An interaction term was created by multiplying gender with the new centered age variable. Two separate one-tailed hierarchical regressions were run, with gender and age entered in the first block, followed by the interaction term in the second block, with each measure of sexuality awareness entered as the dependent variable. Results are displayed in Table 18 and Figure 2.

Gender was found to significantly moderate the relationship between age and sexuality awareness, as measured by the Sexual Consciousness subscale ( $\beta$  = .26, p < .05). There was a significant difference in sexual consciousness between genders at a younger age, with younger men reporting higher levels of sexual consciousness than younger women. At an older age, both men and women reported similar levels of sexual consciousness. Both younger and older men reported similar levels of sexual consciousness regardless of age; however, older women reported slightly higher levels of sexual consciousness than younger women.

Table 18

Age as a Moderator Between Gender and Sexuality Awareness

Variable	β	р	$\Delta R^2$	F	р
Sexual Consciousness Sul	bscale				
Step 1			.07	8.27	.00
Gender	23	.01			
Age	.09	.16			
Step 2			.02	5.60	.02
Gender	26	.00			
Age	12	.30			
GenX Age	.26	.02			
Sexual Monitoring Subsc	ale				
Step 1			.06	6.30	.00
Gender	.09	.20			
Age	.24	.00			
Step 2			.00	.94	.33
Gender	.10	.16			
Age	.32	.01			
GenX Age	11	.33			

*Note.* GenXAge = Interaction term of Gender X Age.

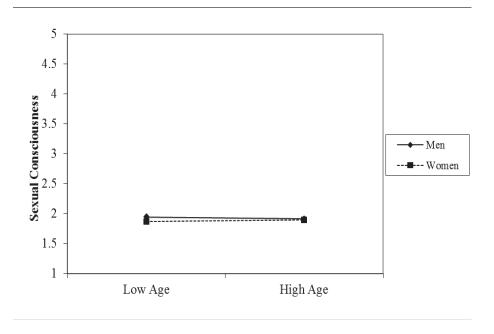


Figure 2. Interaction Between Age and Sexuality Awareness with Gender as a Moderator.

## Fifth Hypothesis

It was also hypothesized that age would moderate the relationship between sanctification and sexuality awareness. This hypothesis was partially supported; out of six analyses run, one was significant. First, age and the measures of sanctification were centered. Next, interaction terms were created by multiplying the centered age variable by the centered measures of sanctification. A series of hierarchical regressions was run, entering age and sanctification in the first block and the interaction term in the second block. In all

sets of regressions, each measure of sexuality awareness was entered as the dependent variable. Results are displayed in Table 19 and Figure 3.

Age was found to moderate the relationship between sanctification as measured by the Manifestation of God in the Body Scale and the Sexual Consciousness subscale ( $\beta$  = -7.01, p < .01). Older participants reported higher levels of sexuality awareness than younger participants, regardless of reported sanctification. For both younger and older participants, those who reported higher levels of sanctification also reported higher levels of sexual consciousness than those participants who reported lower levels of sanctification.

Table 19

Age as a Moderator Between Sanctification and Sexuality Awareness

Variable	β	р	$\Delta R^2$	F	р
Sexual Consciousness Sui	bscale				
Step 1			.03	2.97	.05
SQ	08	.23			
Age	13	.05			
Step 2			.01	2.37	.13
SQ	07	.33			
Age	15	.03			
AgeXSQ	.11	.13			
Sexual Monitoring Subsc	ale				
Step 1			.05	5.47	.01
SQ	.01	.88			
Age	.22	.00			
Step 2			.01	2.42	.12
SQ	00	.96			
Age	.24	.00			
AgeXSQ	11	.12			
Sexual Consciousness Sui	bscale				
Step 1			.06	6.38	.00
Age	.12	.08			
MGBS	.19	.01			
Step 2			.03	6.61	.01
Age	7.13	.01			
MGBS	17	.01			
AgeXMGBS	-7.01	.01			

Note. SQ = Sacred Qualities of the Body; AgeXSQ = Interaction term of Age X Sacred Qualities of the Body.

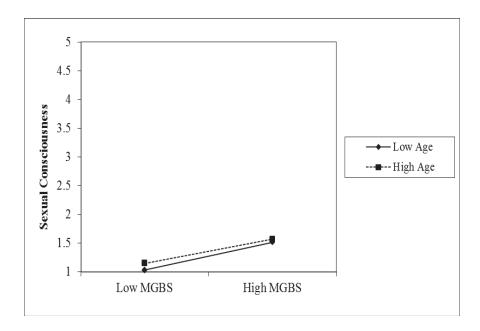
(table continues)

Table 19 (continued)

Age as a Moderator Between Sanctification and Sexuality Awareness

Variable	β	р	$\Delta R^2$	F	р
	1				
Sexual Monitoring Subsca	le				
Step 1			.05	6.24	.00
Age	.21	.00			
MGBS	.08	.23			
Step 2			.00	.05	.82
Age	.83	.76			
MGBS	.08	.24			
AgeXMGBS	62	.82			
Sexual Consciousness Subs	scale				
Step 1			.06	7.30	.00
Age	.11	.11			
XNTB	.21	.00			
Step 2			.01	2.78	.10
Age	.14	.05			
XNTB	.20	.00			
AgeXXNTB	.11	.09			
Sexual Monitoring Subsca	le				
Step 1			.06	7.53	.00
Age	.20	.00			
XNTB	.13	.05			
Step 2			.00	.42	.52
Age	.19	.01			
XNTB	.14	.04			
AgeXXNTB	04	.52			

*Note.* MGBS = Manifestation of God in the Body; AgeXMGBS = Interaction term of Age X Manifestation of God in the Body.



*Figure 3.* Interaction Between Manifestation of God in the Body Scale and Sexuality Awareness with Age as a Moderator.

## **Post-Hoc Analyses**

Religious attitudes and sexual activity. A series of post-hoc analyses was conducted to explore possible differences in religious attitudes between sexually active, unmarried participants and non-sexually active, unmarried participants. A series of independent samples t-tests was run to compare levels of radical dualism, sanctification, religious commitment, and intrinsic/extrinsic religiosity between unmarried participants who reported being sexually active and unmarried participants who reported not being sexually active. A Bonferroni correction was calculated by dividing .05 by nine, resulting in a cutoff value of p < .005. Results are shown in Table 20.

Table 20

Levels of Dualism, Sanctification, Religious Commitment, and Intrinsic/Extrinsic Religiosity Among Unmarried, Sexually Active or Abstinent Participants

	Sexually	y Active	t	df	
	Yes	No		J	
DS	3.40	2.92	-1.13	62	
	(1.17)	(.99)			
SQ	3.92	4.62	1.25	62	
	(1.77)	(1.26)			
MGBS	2.52	2.56	1.44	62	
	(.10)	(.06)			
XNTB	.88	.89	2.45	62	
	(.01)	(.01)			
RelCom	.75	.76	1.88	62	
	(.02)	(.01)			
INT	.65	.67	3.03*	62	
	(.02)	(.02)			
EXT	2.33	2.32	06	62	
	(.67)	(.58)			
EXT-S	2.17	2.13	12	62	
	(.97)	(.74)			
EXT-P	2.50	2.51	.05	62	
	(.55)	(.76)			

Note. \* = p < .005. Standard Deviations appear in parentheses below means. DS = Dualism Scale; SQ = Sacred Qualities of the Body; MGBS = Manifestation of God in the Body; XNTB = Christian Teachings on the Body; RelCom = Religious Commitment; INT = Intrinsic Religiosity; EXT = Extrinsic Religiosity; EXT-S = Extrinsic Religiosity-social subscale; EXT-P = Extrinsic Religiosity-personal subscale.

A significant difference was found between groups in levels of intrinsic religiosity, t(62) = 3.03, p < .005. Specifically, unmarried participants who were not sexually active reported higher levels of intrinsic religiosity (M = .67, SD = .02) than unmarried participants who were sexually active (M = .65, SD = .02). No significant differences were found between groups for radical dualism, sanctification, religious commitment, or extrinsic religiosity.

Marital status, sexual activity, religious attitudes, and sexuality **awareness.** A set of double moderation analyses was conducted to explore whether marital status and sexual activity moderates the relationship between radical dualism or sanctification and sexuality awareness. First, the variables of sexual activity, radical dualism, and sanctification were centered. Next, two-way interaction terms were created by multiplying the centered variable of sexual activity with each measure of radical dualism or sanctification. Two-way interaction terms were also created by multiplying the variable of marital status with each measure of radical dualism or sanctification. A two-way interaction term was also created by multiplying marital status and the centered variable of sexual activity. Finally, three-way interaction terms were created by multiplying sexual activity, marital status, and each measure of either radical dualism or sanctification.

Next, a series of moderation analyses was run, with each measure of radical dualism or sanctification, sexual activity, and marital status entered in the first block, followed by the two-way interaction terms entered into the second block, and the three-way interaction term entered into the third block. In each regression, one of the two measures of sexual awareness was entered as the dependent variable. A Bonferroni correction was calculated by dividing .05 by four, resulting in a cutoff value of p < .01. Results for radical dualism regressions are shown in Table 21; results for sanctification regressions are shown in Tables 22, 23, and 24.

Marital status and sexual activity were found to moderate the relationship between sanctification as measured by the Sacred Qualities of the Body Scale and sexual awareness as measured by the Sexual Consciousness subscale ( $\beta$  = -2.32, p < .001). Results are displayed in Figure 4.

Table 21

Marital Status and Sexual Activity as Moderators Between Dualism and Sexuality

Awareness Among All Participants

Vari	iable	β	р	$\Delta R^2$	F	р		
Sexual Monitoring								
Step 1				.05	3.69	.01		
1	DS	18	.01					
	MS	.17	.03					
	SA	10	.19					
Step 2				.03	1.96	.12		
-	DS	.10	.47					
	MS	.20	.11					
	SA	22	.45					
	DSXSA	.06	.45					
	DSXMS	34	.02					
	SAXMS	.09	.71					
Step 3				.00	.07	.80		
	DS	.16	.56					
	MS	.20	.12					
	SA	21	.47					
	DSXSA	.14	.64					
	DSXMS	39	.11					
	SAXMS	.09	.73					
	DSXMSXSA	07	.80					

Note. DS = Dualism; MS = Marital Status; SA = Sexual Activity; DSXSA = Interaction term of Dualism and Sexual Activity; DSXMS = Interaction term of Dualism and Marital Status; SAXMS = Interaction term of Sexual Activity and Marital Status; DSXMSXSA = Interaction term of Dualism and Marital Status and Sexual Activity.

Table 21 (continued)

Marital Status and Sexual Activity as Moderators Between Dualism and Sexuality

Awareness Among All Participants

Vari	iable	β	p	$\Delta R^2$	F	p
Sexual Cons	sciousness					
Step 1				.04	2.81	.04
	DS	04	.60			
	MS	.11	.16			
	SA	.11	.16			
Step 2				.02	1.32	.27
	DS	15	.29			
	MS	01	.91			
	SA	.49	.09			
	DSXSA	.04	.66			
	DSXMS	.13	.37			
	SAXMS	34	.17			
Step 3				.00	.04	.85
	DS	20	.49			
	MS	01	.93			
	SA	.49	.09			
	DSXSA	02	.96			
	DSXMS	.17	.48			
	SAXMS	34	.18			
	DSXMSXSA	.05	.85			

Note. DS = Dualism; MS = Marital Status; SA = Sexual Activity; DSXSA = Interaction term of Dualism and Sexual Activity; DSXMS = Interaction term of Dualism and Marital Status; SAXMS = Interaction term of Sexual Activity and Marital Status; DSXMSXSA = Interaction term of Dualism and Marital Status and Sexual Activity.

Table 22
Marital Status and Sexual Activity as Moderators Between Sanctification and Sexuality
Awareness Among All Participants

Vari	able	β	p	$\Delta R^2$	F	р
Sexual Mon	itoring					
Step 1				.02	1.36	.26
	SQ	.03	.65			
	MS	.16	.05			
	SA	11	.19			
Step 2				.00	.12	.95
	SQ	.01	.73			
	MS	.17	.22			
	SA	16	.62			
	SQXSA	.04	.65			
	SQXMS	02	.92			
	SAXMS	.05	.86			
Step 3				.00	.18	.68
-	SQ	26	.73			
	MS	.32	.41			
	SA	52	.57			
	SQXSA	26	.72			
	SQXMS	.22	.70			
	SAXMS	.35	.65			
	SQXMSXSA	.23	.68			

*Note.* SQ = Sacred Qualities; MS = Marital Status; SA = Sexual Activity; SQXSA = Interaction term of Sacred Qualities and Sexual Activity; SQXMS = Interaction term of Sacred Qualities and Marital Status; SAXMS = Interaction term of Sexual Activity and Marital Status; SQXMSXSA = Interaction term of Sacred Qualities and Marital Status and Sexual Activity.

(table continues)

Table 22 (continued)

Marital Status and Sexual Activity as Moderators Between Sanctification and Sexuality

Awareness Among All Participants

Vari	able	β	р	$\Delta R^2$	F	p		
Sexual Consciousness								
Step 1	serousness			.05	3.37	.02		
r	SQ	.09	.17					
	MS	.11	.17					
	SA	.11	.16					
Step 2				.02	1.70	.17		
-	SQ	.30	.04					
	MS	13	.35					
	SA	74	.02					
	SQXSA	.14	.13					
	SQXMS	20	.16					
	SAXMS	56	.04					
Step 3				.08	20.08	.000		
	SQ	3.39	.000					
	MS	-1.64	.000					
	SA	4.31	.000					
	SQXSA	3.17	.000					
	SQXMS	-2.56	.000					
	SAXMS	-3.52	.000					
	SQXMSXSA	-2.32	.000					

*Note.* SQ = Sacred Qualities; MS = Marital Status; SA = Sexual Activity; SQXSA = Interaction term of Sacred Qualities and Sexual Activity; SQXMS = Interaction term of Sacred Qualities and Marital Status; SAXMS = Interaction term of Sexual Activity and Marital Status; SQXMSXSA = Interaction term of Sacred Qualities and Marital Status and Sexual Activity.

Table 23

Marital Status and Sexual Activity as Moderators Between Sanctification and Sexuality

Awareness Among All Participants

Vari	able	β	p	$\Delta R^2$	F	р
Sexual Mon	uitoring					
Step 1				.03	1.92	.13
1	MGBS	09	.17			
	MS	.15	.07			
	SA	10	.22			
Step 2				.00	.20	.90
	MGBS	01	.01			
	MS	.19	.19			
	SA	20	.62			
	MGBSXSA	.00	.02			
	MGBSXMS	10	.64			
	SAXMS	.09	.32			
Step 3				.00	.17	.68
	MGBS	.22	.70			
	MS	.32	.37			
	SA	52	.54			
	MGBSXSA	.25	.68			
	MGBSXMS	28	.55			
	SAXMS	35	.62			
	MGBSXMSXS.	A22	.68			

Note. MGBS = Manifestation of God in the Body; MS = Marital Status; SA = Sexual Activity; MGBSXSA = Interaction term of Manifestation of God in the Body and Sexual Activity; MGBSXMS = Interaction term of Manifestation of God in the Body and Marital Status; SAXMS = Interaction term of Sexual Activity and Marital Status; MGBSXMSXSA = Interaction term of Manifestation of God in the Body and Marital Status and Sexual Activity.

(table continues)

Table 23 (continued)

Marital Status and Sexual Activity as Moderators Between Sanctification and Sexuality

Marital Status and Sexual Activity as Moderators Between Sanctification and Sexuality Awareness Among All Participants

Vari	able	β	р	$\Delta R^2$	F	р
0 10						
Sexual Cons	sciousness					
Step 1				.08	5.79	.00
	MGBS	20	.00			
	MS	.09	.26			
	SA	.13	.11			
Step 2				.04	3.14	.03
	MGBS	52	.00			
	MS	21	.12			
	SA	.92	.00			
	MGBSXSA	11	.16			
	MGBSXMS	.35	.02			
	SAXMS	69	.01			
Step 3				.03	6.04	.02
1	MGBS	-1.80	.00			
	MS	97	.00			
	SA	2.72	.00			
	MGBSXSA	-1.51	.01			
	MGBSXMS	-1.38	.00			
	SAXMS	-2.19	.00			
	MGBSXMSXS		.02			

Note. MGBS = Manifestation of God in the Body; MS = Marital Status; SA = Sexual Activity; MGBSXSA = Interaction term of Manifestation of God in the Body and Sexual Activity; MGBSXMS = Interaction term of Manifestation of God in the Body and Marital Status; SAXMS = Interaction term of Sexual Activity and Marital Status; MGBSXMSXSA = Interaction term of Manifestation of God in the Body and Marital Status and Sexual Activity.

Table 24

Marital Status and Sexual Activity as Moderators Between Sanctification and Sexuality

Awareness Among All Participants

Variable	β	р	$\Delta R^2$	F	р
Sexual Monitoring					
Step 1			.04	2.82	.04
XNTB	15	.04	.01	2.02	.01
MS	.13	.10			
SA	09	.26			
Step 2	07	.20	.00	.13	.94
XNTB	07	.62	.00	.15	./1
MS	07 16	.31			
SA	15	.69			
XNTBXSA	.01	.94			
XNTBXMS	08	.58			
SAXMS	.05	.88			
Step 3	.03	.00	.00	.09	.76
XNTB	.01	.97	.00	.07	.70
MS	.24	.43			
SA	33	.64			
XNTBXSA	.10	.76			
XNTBXMS	15	.58			
SAXMS	13 20	.74			
XNTBXMSXSA	20 08	.74 .76			

*Note.* XNTB = Christian Teachings on the Body; MS = Marital Status; SA = Sexual Activity; XNTBXSA = Interaction term of Christian Teachings on the Body and Sexual Activity; XNTBXMS = Interaction term of Manifestation of God in the Body and Marital Status; SAXMS = Interaction term of Sexual Activity and Marital Status; XNTBXMSXSA = Interaction term of Christian Teachings on the Body and Marital Status and Sexual Activity.

(table continues)

Table 24 (continued)

Marital Status and Sexual Activity as Moderators Between Sanctification and Sexuality

Awareness Among All Participants

Variable	β	р	$\Delta R^2$	F	р
Sexual Consciousness					
Step 1			.09	6.49	.00
XNTB	22	.00			
MS	.92	.36			
SA	.14	.08			
Step 2			.05	3.55	.02
XNTB	55	.00			
MS	29	.05			
SA	1.07	.00			
XNTBXSA	07	.42			
XNTBXMS	.34	.02			
SAXMS	82	.01			
Step 3			.68	.68	.41
XNTB	77	.01			
MS	49	.09			
SA	1.55	.02			
XNTBXSA	30	.31			
XNTBXMS	.51	.05			
SAXMS	-1.22	.03			
XNTBXMSXSA	20	.41			

*Note.* XNTB = Christian Teachings on the Body; MS = Marital Status; SA = Sexual Activity; XNTBXSA = Interaction term of Christian Teachings on the Body and Sexual Activity; XNTBXMS = Interaction term of Manifestation of God in the Body and Marital Status; SAXMS = Interaction term of Sexual Activity and Marital Status; XNTBXMSXSA = Interaction term of Christian Teachings on the Body and Marital Status and Sexual Activity.

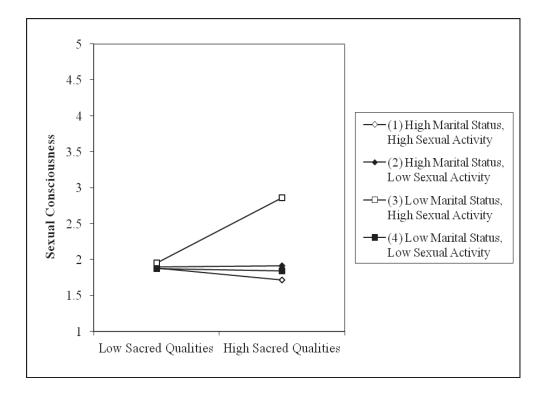
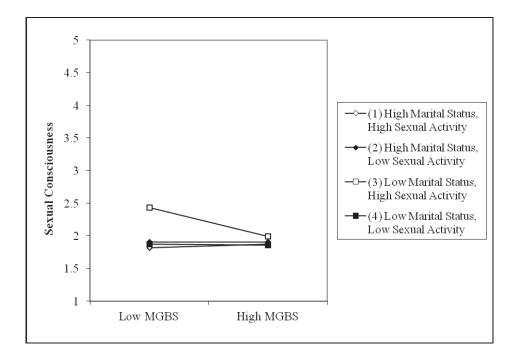


Figure 4. Three-way Interaction Between Sacred Qualities of the Body Scale and Sexuality Awareness with Marital Status and Sexual Activity as Moderators.

Unmarried participants who were sexually active and had higher levels of sanctification had higher levels of sexual awareness than unmarried participants who reported low levels of sexual activity or married participants who reported various levels of sexual activity. Married participants who were sexually active and reported higher levels of sanctification reported lower levels of sexual awareness than married, sexually active participants who reported lower levels of sanctification.

Marital status and sexual activity also moderated the relationship between sanctification as measured by the Manifestation of God in the Body Scale and the Sexual Consciousness subscale ( $\beta$  = 1.21, p < .01). Results are shown in Figure 5.



*Figure 5.* Three-way Interaction Between Manifestation of God in the Body Scale and Sexuality Awareness with Marital Status and Sexual Activity as Moderators.

Unmarried, sexually active participants who reported higher levels of sanctification reported lower levels of sexual awareness, whereas unmarried, sexually active participants with lower levels of sanctification reported higher levels of sexual awareness. Married, sexually active participants who reported higher levels of sanctification reported higher levels of sexual awareness than

married, sexually active participants who reported lower levels of sanctification.

Marital status and sexual activity did not moderate the relationship between

dualism and sexuality awareness or between sexuality awareness and

sanctification as measured by the Christian Teachings on the Body Scale.

In order to further explore the interactions between these variables, the same double moderation analyses were run on both women and men. The same interaction terms were used for all regressions run. It should be noted that due to the small number of men who reported being unmarried (n = 12), there was too little power to test a moderation and therefore analyses could not be run. Results for double moderation analyses with women are shown in Tables 25, 26, 27, and 28.

Table 25

Marital Status and Sexual Activity as Moderators Between Dualism and Sexuality
Awareness Among Women

Vari	iable	β	р	$\Delta R^2$	F	р
Sexual Mon	nitorino					
Step 1	mornig			.05	2.49	.06
1	DS	12	.14			
	MS	.20	.05			
	SA	22	.03			
Step 2				.06	3.17	.03
-	DS	.15	.37			
	MS	.50	.01			
	SA	-1.04	.01			
	DSXSA	.04	.71			
	DSXMS	33	.07			
	SAXMS	.71	.04			
Step 3				.03	4.10	.05
	DS	37	.22			
	MS	.68	.00			
	SA	-1.52	.00			
	DSXSA	60	.07			
	DSXMS	.06	.81			
	SAXMS	1.09	.01			
	DSXMSXSA	.59	.05			

Note. DS = Dualism; MS = Marital Status; SA = Sexual Activity; DSXSA = Interaction term of Dualism and Sexual Activity; DSXMS = Interaction term of Dualism and Marital Status; SAXMS = Interaction term of Sexual Activity and Marital Status; DSXMSXSA = Interaction term of Dualism and Marital Status and Sexual Activity.

Table 25 (continued)

Marital Status and Samuel Activity as Moderators Patroon Dualism and S

Marital Status and Sexual Activity as Moderators Between Dualism and Sexuality Awareness Among Women

Vari	iable	β	p	$\Delta R^2$	F	p
Sexual Cons	sciousness					
Step 1				.02	.76	.52
	DS	01	.88			
	MS	.02	.85			
	SA	.11	.27			
Step 2				.02	1.08	.36
	DS	21	.20			
	MS	05	.80			
	SA	.32	.46			
	DSXSA	00	.97			
	DSXMS	.25	.18			
	SAXMS	18	.63			
Step 3				.00	.01	.92
	DS	24	.45			
	MS	04	.86			
	SA	.29	.56			
	DSXSA	04	.92			
	DSXMS	.27	.33			
	SAXMS	15	.71			
	DSXMSXSA	.03	.92			

Note. DS = Dualism; MS = Marital Status; SA = Sexual Activity; DSXSA = Interaction term of Dualism and Sexual Activity; DSXMS = Interaction term of Dualism and Marital Status; SAXMS = Interaction term of Sexual Activity and Marital Status; DSXMSXSA = Interaction term of Dualism and Marital Status and Sexual Activity.

Table 26

Marital Status and Sexual Activity as Moderators Between Sanctification and Sexuality

Awareness Among Women

Vari	iable	β	р	$\Delta R^2$	F	р
Sexual Mon	nitorino					
Step 1	illoring			.04	1.94	.13
1	SQ	21	.42			
	MS	.18	.08			
	SA	.07	.04			
Step 2				.04	2.10	.10
-	SQ	14	.41			
	MS	.58	.00			
	SA	-1.25	.01			
	SQXSA	06	.60			
	SQXMS	.21	.21			
	SAXMS	.89	.02			
Step 3				.01	1.13	.29
	SQ	-1.08	.23			
	MS	1.09	.04			
	SA	-2.40	.04			
	SQXSA	96	.26			
	SQXMS	.88	.18			
	SAXMS	1.83	.06			
	SQXMSXSA	.64	.29			

*Note.* SQ = Sacred Qualities; MS = Marital Status; SA = Sexual Activity; SQXSA = Interaction term of Sacred Qualities and Sexual Activity; SQXMS = Interaction term of Sacred Qualities and Marital Status; SAXMS = Interaction term of Sexual Activity and Marital Status; SQXMSXSA = Interaction term of Sacred Qualities and Marital Status and Sexual Activity.

Table 26 (continued)

Marital Status and Sexual Activity as Moderators Between Sanctification and Sexuality Awareness Among Women

Vari	able	β	р	$\Delta R^2$	F	р
Sexual Cons	sciousness					
Step 1				.04	1.76	.16
	SQ	.14	.09			
	MS	.01	.93			
	SA	.12	.23			
Step 2				.02	.91	.44
	SQ	.37	.04			
	MS	24	.24			
	SA	.74	.11			
	SQXSA	.15	.21			
	SQXMS	21	.21			
	SAXMS	52	.18			
Step 3				.08	12.56	.001
	SQ	3.43	.000			
	MS	-1.90	.000			
	SA	4.52	.000			
	SQXSA	3.09	.000			
	SQXMS	-2.41	.000			
	SAXMS	-3.60	.000			
	SQXMSXSA	-2.11	.001			

*Note.* SQ = Sacred Qualities; MS = Marital Status; SA = Sexual Activity; SQXSA = Interaction term of Sacred Qualities and Sexual Activity; SQXMS = Interaction term of Sacred Qualities and Marital Status; SAXMS = Interaction term of Sexual Activity and Marital Status; SQXMSXSA = Interaction term of Sacred Qualities and Marital Status and Sexual Activity.

Table 27

Marital Status and Sexual Activity as Moderators Between Sanctification and Sexuality

Awareness Among Women

Variable		β	p	$\Delta R^2$	F	р
Sexual Mon	itoring					
Step 1	8			.04	2.18	.09
1	MGBS	10	.25			
	MS	.16	.10			
	SA	19	.06			
Step 2				.06	2.94	.04
	MGBS	25	.14			
	MS	.63	.00			
	SA	-1.42	.00			
	MGBSXSA	.13	.21			
	MGBSXMS	37	.03			
	SAXMS	1.04	.01			
Step 3				.00	.49	.49
	MGBS	.70	.29			
	MS	.94	.05			
	SA	-2.12	.06			
	MGBSXSA	.62	.39			
	MGBSXMS	71	.18			
	SAXMS	1.61	.08			
	MGBSXMSXS	6A .62	.49			

Note. MGBS = Manifestation of God in the Body; MS = Marital Status; SA = Sexual Activity; MGBSXSA = Interaction term of Manifestation of God in the Body and Sexual Activity; MGBSXMS = Interaction term of Manifestation of God in the Body and Marital Status; SAXMS = Interaction term of Sexual Activity and Marital Status; MGBSXMSXSA = Interaction term of Manifestation of God in the Body and Marital Status and Sexual Activity.

(table continues)

Table 27 (continued)

Marital Status and Sexual Activity as Moderators Between Sanctification and Sexuality Awareness Among Women

Variable		β	p	$\Delta R^2$	F	р
Sexual Conso	ciousness					
Step 1				.11	5.59	.00
	MGBS	30	.00			
	MS	04	.69			
	SA	.18	.07			
Step 2				.02	1.19	.32
	MGBS	51	.00			
	MS	34	.09			
	SA	.96	.04			
	MGBSXSA	06	.55			
	MGBSXMS	.21	.21			
	SAXMS	66	.08			
Step 3				.04	5.76	.02
	MGBS	-2.00	.00			
	MS	-1.37	.00			
	SA	3.31	.00			
	MGBSXSA	-1.70	.02			
	<b>MGBSXMS</b>	1.38	.01			
	SAXMS	-2.59	.00			
	MGBSXMSXS	SA 1.42	.02			

Note. MGBS = Manifestation of God in the Body; MS = Marital Status; SA = Sexual Activity; MGBSXSA = Interaction term of Manifestation of God in the Body and Sexual Activity; MGBSXMS = Interaction term of Manifestation of God in the Body and Marital Status; SAXMS = Interaction term of Sexual Activity and Marital Status; MGBSXMSXSA = Interaction term of Manifestation of God in the Body and Marital Status and Sexual Activity.

Table 28

Marital Status and Sexual Activity as Moderators Between Sanctification and Sexuality

Awareness Among Women

Vari	able	β	р	$\Delta R^2$	F	p
Sexual Mon	Sexual Monitoring					
Step 1				.06	6.49	.04
	XNTB	15	.07			
	MS	.15	.13			
	SA	19	.06			
Step 2				.05	3.55	.06
	XNTB	.22	.25			
	MS	.69	.01			
	SA	-1.53	.01			
	XNTBXSA	.08	.45			
	XNTBXMS	36	.05			
	SAXMS	1.14	.02			
Step 3				.90	.68	
	XNTB	20.11				
	MS	25.25				
	SA	-59.17				
	XNTBXSA	18.46				
	XNTBXMS	-15.29				
	SAXMS	48.13				
	XNTBXMSX	SA-13.91				

*Note.* XNTB = Christian Teachings on the Body; MS = Marital Status; SA = Sexual Activity; XNTBXSA = Interaction term of Christian Teachings on the Body and Sexual Activity; XNTBXMS = Interaction term of Manifestation of God in the Body and Marital Status; SAXMS = Interaction term of Sexual Activity and Marital Status; XNTBXMSXSA = Interaction term of Christian Teachings on the Body and Marital Status and Sexual Activity.

Table 28 (continued)

Marital Status and Sexual Activity as Moderators Between Sanctification and Sexuality Awareness Among Women

Vari	able	β	р	$\Delta R^2$	F	р
2 10						
Sexual Cons	sciousness					
Step 1				.09	2.82	.00
	XNTB	28	.001			
	MS	04	.69			
	SA	.16	.10			
Step 2				.04	.13	.08
	XNTB	59	.00			
	MS	51	.04			
	SA	1.34	.02			
	XNTBXSA	04	.73			
	XNTBXMS	.30	.09			
	SAXMS	-1.00	.04			
Step 3				.26	.09	.000
1	XNTB	-10.63	.000			
	MS	-12.90	.000			
	SA	30.43	.000			
	XNTBXSA	-9.31	.000			
	XNTBXMS	7.84	.000			
	SAXMS	-24.72	.000			
	XNTBXMSX		.000			

*Note.* XNTB = Christian Teachings on the Body; MS = Marital Status; SA = Sexual Activity; XNTBXSA = Interaction term of Christian Teachings on the Body and Sexual Activity; XNTBXMS = Interaction term of Manifestation of God in the Body and Marital Status; SAXMS = Interaction term of Sexual Activity and Marital Status; XNTBXMSXSA = Interaction term of Christian Teachings on the Body and Marital Status and Sexual Activity.

For women, marital status and sexual activity moderated the relationship between sanctification as measured by all three sanctification scales and sexuality awareness. Specifically, marital status and sexual activity moderated the relationship between sexual awareness as measured by the Sexual Consciousness subscale and sanctification as measured by the Sacred Qualities Scale ( $\beta$  = -2.11, p = .001). Results are shown in Figure 6.

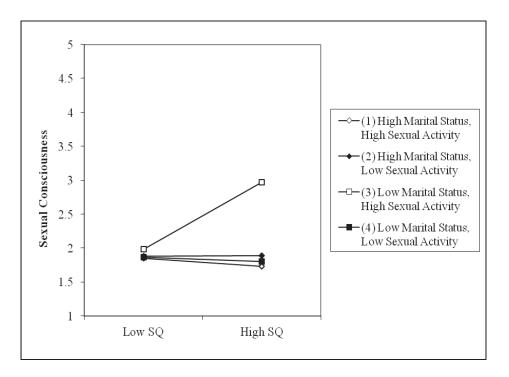
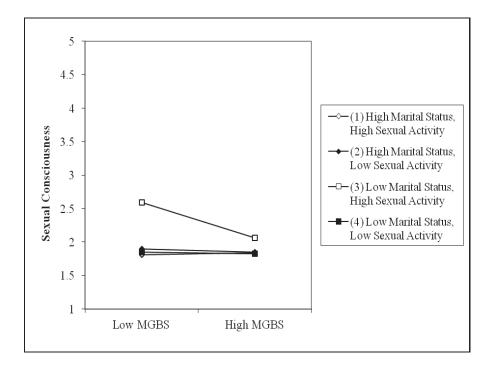


Figure 6. Three-way Interaction Between Sacred Qualities of the Body Scale and Sexuality Awareness with Marital Status and Sexual Activity as Moderators Among Women.

Unmarried women who were sexually active and reported higher levels of sanctification reported higher levels of sexual awareness. Unmarried women who reported low levels of sexual activity and higher levels of sanctification reported lower levels of sexual awareness.

Likewise, marital status and sexual activity moderated the relationship between sexual awareness as measured by the Sexual Consciousness subscale and sanctification as measured by the Manifestation of God in the Body Scale ( $\beta$  = 1.42, p < .02). Results are shown in Figure 7.



*Figure 7.* Three-way Interaction Between Manifestation of God in the Body Scale and Sexuality Awareness with Marital Status and Sexual Activity as Moderators Among Women.

Unmarried, sexually active women who reported higher levels of sanctification reported lower levels of sexual awareness, whereas unmarried sexually active women who reported lower levels of sanctification reported higher levels of sexual awareness.

Finally, marital status and sexual activity moderated the relationship between sexual awareness as measured by the Sexual Consciousness subscale and sanctification as measured by the Christian Teachings on the Body Scale ( $\beta$  = 7.02, p < .001). Results are displayed in Figure 8.

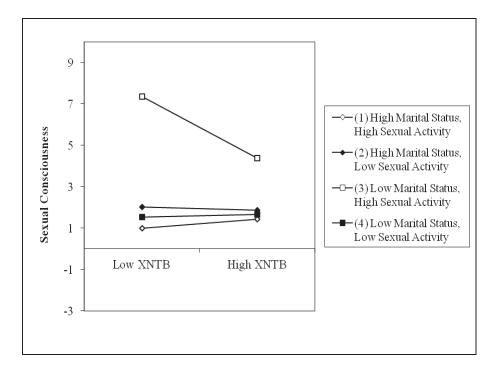


Figure 8. Three-way Interaction Between Christian Teachings on the Body Scale and Sexuality Awareness with Marital Status and Sexual Activity as Moderators Among Women.

Unmarried, sexually active women who reported higher levels of sanctification reported lower levels of sexual awareness than unmarried, sexually active women who reported lower levels of sanctification. Married, sexually active women who reported higher levels of sanctification reported higher levels of sexuality awareness than married, sexually active women who reported lower levels of sanctification.

## Sixth Hypothesis

It was hypothesized that body shame would mediate the relationship between radical dualism and objectification and the relationship between sanctification and objectification. This hypothesis was partially supported; out of two mediation analyses run, one was significant. A series of one-tailed Pearson correlations was first run to establish correlations between the measures of radical dualism, objectification, and body shame, as shown in Table 29.

Table 29

Intercorrelations Between Dualism, Body Shame, and Body Objectification

	,	J	<u> </u>	<i>J</i>
Measure	1	2		
1. DS	_		_	_
2. OBCS-SRV	.12*	_	_	_
3. OBCS-SHM	.26**	.38**	_	_
4. BIGSS-SHM	.16**	.36**	.55**	_

*Note.* DS = Dualism Scale; OBCS-SRV = Objectified Body Consciousness-Surveillance Subscale; OBCS-SHM = Objectified Body Consciousness- Shame Subscale; BIGSS-SHM = Body Image Guilt and Shame Scale- Shame Subscale, \* p < .05, \*\* p < .01.

Dualism was found to be positively correlated with body objectification, as measured by the Objectified Body Consciousness Surveillance subscale (r = .12, p < .05). Body objectification was found to be positively correlated with both measures of body shame, as measured by the Body Image Guilt and Shame Scale- Shame Subscale and the Objectified Body Consciousness- Shame subscale (r = .36, p < .001; r = .38, p < .001, respectively).

Two hierarchical regressions were then run, with each measure of body shame entered into the first block, followed by the same measure of body shame and radical dualism in the second block, with the measure of body objectification as the dependent variable. Results are shown in Table 30.

Table 30

Mediation Analysis Summary for Body Shame as a Mediator Between Dualism and Objectification

Variable	β	р	$\Delta R^2$	F	р
	<u>'</u>				,
Objectified Body Conscious	ness- Survei	llance			
Step 1			.12	34.43	.00
BIGSS_SHM	.36	.00			
Step 2			.00	1.08	.30
BIGSS_SHM	.35	.00			
Dualism	.06	.30			
Objectified Body Conscious	ness- Survei	llance			
Step 1			.14	38.85	.00
OBCS_SHM	.38	.00			
Step 2			.00	.13	.72
OBCS_SHM	.37	.00			
Dualism	.02	.72			

*Note.* BIGSS\_SHM = Body Image Guilt and Shame- Shame Subscale; OBCS\_SHM = Objectified Body Consciousness Scale- Shame Subscale.

Both measures of body shame were found to mediate between the measures of radical dualism and objectification. The Body Image Guilt and Shame Scale significantly predicted the measure of objectification ( $\beta$  = .35; p < .01); however, once radical dualism was entered into the regression, it was no longer significant ( $\beta$  = .06; p = .30). Likewise, the Objectified Body Consciousness Shame subscale significantly predicted the measure of objectification ( $\beta$  = .37; p <

.01) but once the measure of radical dualism was entered, it no longer did ( $\beta$  = .02, p = .72).

A second series of one-tailed Pearson correlations was run to establish correlations between the measures of sanctification, body objectification, and body shame. Results are shown in Table 31.

Table 31

Intercorrelations Between Sanctification, Body Shame, and Body Objectification

Measure	1	2	3	4	5	6
1. SQ	_	_			_	
2. MGBS	.55**	_			_	
3. XNTB	.59**	.73**		_	_	
4. OBCS-SRV	07	11	09		_	
5. OBCS-SHM	.05	.03	.00	.38**	_	_
6. BIGSS-SHM	.05	.01	.04	.36**	.55**	

*Note.* SQ = Sacred Qualities of the Body Scale; MGBS = Manifestation of God in the Body Scale; XNTB = Christian Teachings on the Body Scale; OBCS-SRV = Objectified Body Consciousness- Surveillance Subscale; OBCS-SHM = Objectified Body Consciousness- Shame Subscale; BIGSS-SHM = Body Image Guilt and Shame Scale- Shame Subscale, \* p < .05, \*\* p < .01.

None of the sanctification measures were significantly correlated with the measure of body objectification (r = -.07; p = .15 for the Sacred Qualities of the

Body Scale; r = -.11; p = .05 for the Manifestation of God in the Body Scale; r = -.09; p = .09 for the Christian Teachings on the Body Scale). Due to the lack of significant correlations between sanctification and body objectification, mediation analyses for body shame as a mediator between sanctification and objectification could not be calculated.

### **Post Hoc Analyses**

Age, gender, and body objectification. A set of post-hoc analyses was conducted on the sixth hypothesis in order to further explore the relationship between age, gender, and body objectification. One-tailed, Pearson correlations were run between the variables of age and the Objectified Body Consciousness-Surveillance subscale. A Bonferroni correction was calculated by dividing .05 by three, resulting in a cutoff value of .02. Results are displayed in Tables 32, 33, and 34.

Table 32

Intercorrelations Between Age and Body Objectification Among All Participants

Measure	1	2
1. Age		_
2. OBCS-SRV	25*	_

*Note.* OBCS-SRV = Objectified Body Consciousness- Surveillance Subscale; \* p < .02.

Table 33

Intercorrelations Between Age and Body Objectification Among Women

Measure	1	2
1. Age	_	_
2. OBCS-SRV	21*	_

*Note.* OBCS-SRV = Objectified Body Consciousness- Surveillance Subscale; \* p < .02.

Table 34

Intercorrelations Between Age and Body Objectification Among Men

Measure	1	2
1. Age	_	_
2. OBCS-SRV	24	_

*Note.* OBCS-SRV = Objectified Body Consciousness- Surveillance Subscale; \* p < .02.

There was a significant correlation between age and body objectification among all participants (r = -.25, p < .001). When divided by gender, there was a significant correlation between age and body objectification among women (r = -.21, p = .005) but not among men (r = -.24, p < .03).

**Age, religious attitudes, and body objectification.** A set of post-hoc analyses was also conducted looking at whether or not age moderated the

relationship between the religious views of the body and body objectification. First, the variables of age, radical dualism, and sanctification were centered. Interaction terms were created by multiplying the centered variable of age with either the measure of dualism or each measure of sanctification. A series of four regressions was run, with the measures of either radical dualism or sanctification entered into the first step and the interaction term entered into the second step. In each regression, the measure of body objectification was entered as the dependent variable. A Bonferroni correction was calculated, with a resulting cutoff value of p < .01. Results are shown in Tables 35, 36, 37, and 38. Age was not found to significantly moderate the relationship between radical dualism or sanctification and body objectification.

Table 35

Age as a Moderator Between Dualism and Body Objectification

Variable	9	β	р	$\Delta R^2$	F	р
Body Objectification						
Step 1				.07	8.66	.00
	Age	24	.00			
	Dualism	.10	.14			
Step 2				.00	.40	.53
	Age	25	.00			
	Dualism	.10	.14			
	AgeXDualism	04	.53			

*Note.* AgeXDualism = Interaction term of Age and Dualism.

Table 36

Age as a Moderator Between Sanctification and Body Objectification

O		J		0 0		
Vari	able	β	р	$\Delta R^2$	F	р
Body Object	tification					
Step 1				.07	7.67	.00
_	Age	25	.00			
	SQ	04	.51			
Step 2				.01	1.69	.20
	Age	26	.00			
	SQ	03	.64			
	AgeXSQ	.09	.20			
	·	<u> </u>				<u> </u>

*Note.* SQ = Sacred Qualities of the Body; AgeXSQ = Interaction term of Age and Sacred Qualities of the Body.

Age as a Moderator Between Sanctification and Body Objectification

Table 37

Variable		β	p	$\Delta R^2$	F	р
Body Objectifi	cation					
Step 1				.07	8.21	.00
	Age	24	.00			
	MGBS	.10	.23			
Step 2				.00	.49	.49
	Age	-2.15	.43			
	MGBS	.07	.27			
	AgeXMGBS	1.19	.49			

*Note.* MGBS = Manifestation of God in the Body; AgeXMGBS = Interaction term of Age and Manifestation of God in the Body.

Table 38

Age as a Moderator Between Sanctification and Body Objectification

		J		J J J		
Vari	able	β	р	$\Delta R^2$	F	р
Body Object	tification					
Step 1				.07	7.77	.00
•	Age	25	.00			
	XNTB	.05	.46			
Step 2				.00	.67	.41
	Age	26	.00			
	XNTB	.04	.52			
	AgeXXNTB	06	.41			

*Note.* XNTB = Christian Teachings on the Body; AgeXXNTB = Interaction term of Age and Christian Teachings on the Body.

### **Seventh Hypothesis**

The seventh hypothesis was that participants who reported being involved in activities such as running, club-level athletics, or dance would report higher levels of sanctification and lower levels of radically dualistic attitudes toward the body than participants who did not report such activity. This hypothesis was partially supported; out of three analyses run, one was significant. A Bonferonni correction was calculated by dividing .05 by three, the number of analyses run. The resulting cutoff value was p < .02.

A series of independent samples *t*-tests was run to compare levels of sanctification and radical dualism among participants who reported engaging in these activities and participants who did not report involvement in these activities. Results are shown in Tables 39, 40, and 41.

Table 39

Levels of Dualism and Sanctification Among Participants Engaging in Running

	Running		t	df
	Yes	No		
DS	3.21	3.04	-1.01	144
	(.94)	(.94)		
SQ	4.71	4.43	-1.47	144
	(1.10)	(1.11)		
MGBS	2.56	2.55	55	143
	(.06)	(.06)		
XNTB	.24	.26	.42	143
	(.18)	(.17)		

*Note.* Standard Deviations appear in parentheses below means. DS = Dualism Scale; SQ = Sacred Qualities of the Body; MGBS = Manifestation of God in the Body; XNTB = Christian Teachings on the Body.

Table 40

Levels of Dualism and Sanctification Among Participants Engaging in Athletics

	Club-leve	Club-level athletics		df
	Yes	No		
DS	3.07	3.13	.38	163
	(1.00)	(.94)		
SQ	4.74	4.42	-1.91	162
	(1.10)	(1.09)		
MGBS	2.57	2.54	-3.07*	162
	(.06)	(.07)		
XNTB	.22	.27	1.76	163
	(.16)	(.18)		

*Note.* \* = p < .02. Standard Deviations appear in parentheses below means. DS = Dualism Scale; SQ = Sacred Qualities of the Body; MGBS = Manifestation of God in the Body; XNTB = Christian Teachings on the Body.

Table 41

Levels of Dualism and Sanctification Among Participants Engaging in Dance

	Dance		t	df	
	Yes	No			
DS	3.00	3.09	.62	152	
	(.90)	(1.01)			
SQ	4.58	4.40	-1.01	152	
	(1.18)	(1.00)			
MGBS	2.56	2.55	91	151	
	(.07)	(.07)			
XNTB	.25	.26	.61	152	
	(.18)	(.17)			

*Note.* Standard Deviations appear in parentheses below means. DS = Dualism Scale; SQ = Sacred Qualities of the Body; MGBS = Manifestation of God in the Body; XNTB = Christian Teachings on the Body.

For involvement in running and dance there was no significant difference between participants who reported involvement in activities and those who did not. However, for involvement in athletics, there was a significant difference in levels of sanctification between the two groups, as measured by the Manifestation of God in the Body Scale, t(162) = -3.07, p < .01, with the athletic group reporting higher levels of sanctification (M = 2.57; SD = 0.06) than the group reporting no involvement in athletics (M = 2.54; SD = 0.07).

# **Eighth Hypothesis**

It was hypothesized that participants who engaged in spiritual disciplines would report higher levels of sanctification and lower levels of radical dualism than those who did not report such activity. This hypothesis was partially supported; out of five run, all five were significant with respect to sanctification but not with radical dualism. A Bonferroni correction was calculated by dividing .05 by five, the number of analyses run. The resulting cutoff value was p < .01.

A series of independent samples *t*-tests was run to compare levels of sanctification and radical dualism among participants who reported engaging in four spiritual disciplines (prayer, meditation, fasting, and study of the Bible), and

participants who reported no involvement in these activities. Results are shown in Tables 42, 43, 44, and 45.

Levels of Dualism and Sanctification Among Participants Engaging in Prayer

Table 42

	Prayer		t	df	
	Yes	No			
DS	3.11	2.71	-1.21	219	
	(.96)	(.85)			
SQ	4.58	3.16	-3.78*	218	
	(1.10)	(1.07)			
MGBS	2.56	2.51	-1.96	218	
	(.06)	(.08)			
XNTB	.89	.88	-1.26	8.30	
	(.01)	(.01)			

*Note.* \* = p < .01. Standard Deviations appear in parentheses below means. DS = Dualism Scale; SQ = Sacred Qualities of the Body; MGBS = Manifestation of God in the Body; XNTB = Christian Teachings on the Body.

Table 43

Levels of Dualism and Sanctification Among Participants Engaging in Meditation

		J	0 1	0 0 0	
	Medita	ntion	t	df	
	Yes	No			
DS	3.09	3.10	.05	219	
	(.95)	(1.03)			
SQ	4.62	3.70	-4.30*	218	
	(1.05)	(1.24)			
MGBS	2.56	2.53	-2.35	35.96	
	(.06)	(.08)			
XNTB	.89	.89	-2.27	34.32	
	(.01)	(.01)			

*Note.* \* = p < .01. Standard Deviations appear in parentheses below means. DS = Dualism Scale; SQ = Sacred Qualities of the Body; MGBS = Manifestation of God in the Body; XNTB = Christian Teachings on the Body.

Levels of Dualism and Sanctification Among Participants Engaging in Fasting

Table 44

	Fas	ting	t	df	
	Yes	No			
DS	3.08	3.10	.13	221	
	(.99)	(.93)			
SQ	4.72	4.28	-2.95*	220	
	(1.03)	(1.19)			
MGBS	2.57	2.55	-1.52	220	
	(.06)	(.07)			
XNTB	.89	.89	-2.49	190.80	
	(.01)	(.01)			

*Note.* \* = p < .01. Standard Deviations appear in parentheses below means. DS = Dualism Scale; SQ = Sacred Qualities of the Body; MGBS = Manifestation of God in the Body; XNTB = Christian Teachings on the Body.

Table 45

Levels of Dualism and Sanctification Among Participants Engaging in Study of the Bible

	Study of th	ne Bible	t	df	
	Yes	No			
					_
DS	3.08	3.18	.23	221	
	(.97)	(.83)			
SQ	4.54	3.71	-1.62	220	
	(1.13)	(.85)			
MGBS	2.56	2.49	-2.45	220	
	(.06)	(.05)			
XNTB	.89	.87	-3.59*	221	
	(.01)	(.01)			

*Note.* \* = p < .01. Standard Deviations appear in parentheses below means. DS = Dualism Scale; SQ = Sacred Qualities of the Body; MGBS = Manifestation of God in the Body; XNTB = Christian Teachings on the Body.

For engaging in prayer, there was a significant difference in levels of sanctification between the two groups, as measured by the Sacred Qualities of the Body Scale, t(218) = -3.78, p < .01. The group who reported engaging in prayer also reported higher levels of sanctification (M = 4.58; SD = 1.10) than the group of participants who stated that they did not pray (M = 3.16; SD = 1.07).

Likewise, there was a significant difference in levels of sanctification as measured by the Sacred Qualities of the Body Scale, t(218) = -4.30, p < .01, between groups of participants who reported engaging in meditation and those

who did not. Consistent with the hypothesis, participants who stated that they engaged in meditation reported higher levels of sanctification (M = 4.62; SD = 1.05) than those who did not (M = 3.70; SD = 1.24).

There was a significant difference in levels of sanctification as measured by the Sacred Qualities of the Body Scale between participants who reported engaging in fasting and those who did not, t(220) = -2.95, p < .01. Participants who reported fasting also reported higher levels of sanctification (M = 4.72; SD = 1.03) than those who reported that they did not fast (M = 4.28; SD = 1.19).

Finally, there was a significant difference in levels of sanctification as measured by the Christian Teachings on the Body Scale between participants who reported engaging in study of the Bible and those who did not, t(221) = -3.59, p < .01. Participants who stated that they studied the Bible also reported higher levels of sanctification (M = .89; SD = .01) than those who reported that they did not (M = .87; SD = .01).

## Ninth Hypothesis

It was hypothesized that being involved in varsity or club-level athletics, dance, running, or participating in sports of any kind would be correlated with higher levels of internal awareness and lower levels of depersonalization and

somatization. This hypothesis was not supported; out of ten analyses run, none were significant according to the Bonferroni correction cutoff value of p < .005.

One-tailed, Pearson correlations were run between involvement in varsity or club-level athletics, dance, running, or sports of any kind, and the outcome measures of internal body awareness, depersonalization, and somatization.

Results are shown in Table 46. Involvement in these activities was not significantly correlated with internal body awareness, depersonalization, or somatization.

Table 46

Intercorrelations Between Involvement in Activities, Internal Awareness, Depersonalization, and Somatization

Measure	1	2	3	4	5	6	7	8	9
1. ClubAth	_				_				_
2. Dance	.05	_	_	_	_	_	_	_	_
3. Running	.40*	.02	_	_	_	_	_	_	_
4. Sports	.25*	17	.23*	_	_	_	_	_	_
5. BAQ	.01	06	.17	.06	_	_	_	_	_
6. BEQ_ALN	.01	.10	.08	11	05	_	_	_	_
7. BEQ_HRM	.02	02	06	.15	43*	19*	_	_	_
8. DEP	05	.03	.02	01	.01	.44*	19*	_	_
9. SOM	08	13	02	.08	06	42	.08	30*	_

Note. ClubAth = Involvement in club-level athletics; Dance = Involvement in Dance; Running = Involvement in Running; Sports = Participation in Sports; SpirDisc = Engaging in Spiritual Disciplines; BAQ = Body Awareness Questionnaire; BEQ\_ALN = Body Experience Questionnaire- Alienation; BEQ\_HRM = Body Experience Questionnaire- Harmony; DEP = Cambridge Depersonalization Scale; SOM = Four Dimensional Symptom Questionnaire, \* p < .005.

### **Tenth Hypothesis**

Based on previous research, it was hypothesized that intrinsic religiosity would be positively correlated with the attitude of body satisfaction, negatively correlated with the attitude of body objectification, and negatively correlated with the experience of difficulty with emotion awareness. It was hypothesized that extrinsic religiosity would be negatively correlated with the attitude of body satisfaction, positively correlated with the attitude of body objectification, and positively correlated with the experience of difficulty with emotion awareness. One-tailed Pearson correlations were run between the measure of intrinsic and extrinsic religiosity and the outcomes measures listed above. Results are shown in Tables 47 (attitudes) and 48 (experiences).

This hypothesis was partially supported; out of eight analyses run for body attitudes, four were significant and out of six analyses run for body experiences, one was significant. Due to the high number of analyses, Bonferroni corrections were calculated by dividing .05 by eight for body attitudes and six for body experiences, resulting in cutoff values of p < .006 for body attitudes and p < .008 for body experiences.

Table 47

Intercorrelations Between Intrinsic/Extrinsic Religiosity, Body Satisfaction, and Body Objectification

Measure	1	2	3	4	5	6	7	8	
1. INT	_	_	_	_	_	_	_	_	
2. EXT	20*	_	_	_	_	_	_	_	
3. EXT-S	16	.79*	_	_	_	_	_	_	
4. EXT-P	15	.81*	.27*	_	_	_	_	_	
5. BASS	.22*	09	05	09	_	_	_	_	
6. BE-APP	.14	08	02	11	.59*	_	_	_	
7. BAS	.27*	<i>-</i> .15	08	15	.69*	.60*	_	_	
8. OBCS-SRV	09	.17*	.17*	.11	26*	13	35*	_	

*Note.* INT = Intrinsic/Extrinsic-Revised- Intrinsic; EXT = Intrinsic/Extrinsic- Extrinsic; EXT-S = Extrinsic- Social subfactor; EXT-P = Extrinsic- Personal subfactor; BASS = Body Areas Satisfaction Subscale; BE-APP = Body Esteem Scale-Appearance Subscale; BAS = Body Appreciation Scale; OBCS-SRV = Objectified Body Consciousness- Surveillance Subscale, \* p < .005.

Table 48

Intercorrelations Between Intrinsic/Extrinsic Religiosity and Difficulties in Emotion Regulation

Measure	1	2	3	4	5	6
1. INT	_	_	_	_	_	_
2. EXT	20*	_	_	_	_	_
3. EXT-S	16	.79*	_	_	_	_
4. EXT-P	15	.81*	.27*	_	_	_
5. DERS-AWR	18*	00	.06	06	10	_
6. DERS-CLR	23*	.06	.12	01	11	

*Note.* INT = Intrinsic/Extrinsic-Revised- Intrinsic; EXT = Intrinsic/Extrinsic- Extrinsic; EXT-S = Extrinsic- Social subfactor; EXT-P = Extrinsic- Personal subfactor; DERS-AWR = Difficulties in Emotion Regulation- Awareness; DERS-CLR = Difficulties in Emotion Regulation- Clarity, \* p < .005.

## **Body Attitudes**

Intrinsic religiosity, as measured by the Intrinsic subscale of the Intrinsic/Extrinsic scale, was positively correlated with body satisfaction, as measured by the Body Areas Satisfaction Subscale (r = .22; p < .001) and the Body Appreciation Scale (r = .27, p < .001). Intrinsic religiosity was not significantly correlated with the measure of body objectification.

The Extrinsic subscale of the Intrinsic/Extrinsic scale was positively correlated with body objectification as measured by the Objectified Body

Consciousness Surveillance subscale (r = .17; p < .004). The Extrinsic subscale was not significantly correlated with the measures of body satisfaction.

The Extrinsic-social subfactor was positively correlated with the Objectified Body Consciousness Surveillance subscale (r = .17; p < .005). It was not significantly correlated with any measures of body satisfaction. The Extrinsic- personal subscale was not significantly correlated with the measures of body satisfaction or body objectification.

#### **Body Experiences**

Intrinsic religiosity was negatively correlated with emotion awareness difficulties, as measured by the Difficulties in Emotion Regulation Awareness and Clarity subscales (r = -.18, p < .005; r = -.23, p = .001, respectively). The Extrinsic subscale, Extrinsic-social subscale, and Extrinsic-personal subscales were not significantly correlated with the measures of difficulty in emotion awareness.

## **Eleventh Hypothesis**

It was hypothesized that extrinsic religiosity would be correlated with radically dualistic attitudes toward the body, whereas intrinsic religiosity would be correlated with a sanctified view of the body. This hypothesis was partially

supported; out of six analyses run, three were significant. A Bonferroni correction was calculated by dividing .05 by six, resulting in a cutoff value of  $\it p < .008$ .

One-tailed Pearson correlations were run between extrinsic religiosity and radical dualism. The Extrinsic subscale, Extrinsic- social subfactor, and Extrinsic-personal subfactor of the Intrinsic/Extrinsic scale were not significantly correlated with radical dualism. One-tailed, Pearson correlations were also run between intrinsic religiosity and the measures of sanctification. Results are shown in Table 49. The Intrinsic subscale of the Intrinsic/Extrinsic scale was positively correlated with the Sacred Qualities of the Body Scale (r = .38; p < .001), the Manifestation of God in the Body Scale (r = .42; p < .001), and the Christian Teachings on the Body Scale (r = .58; p < .001).

Table 49

Intercorrelations Between Intrinsic/Extrinsic Religiosity, Dualism, and Sanctification

Measure	1	2	3	4	5	6	7	8	
1. INT	_	_	_	_	_	_	_	_	
2. EXT	20*	_	_	_	_	_	_	_	
3. EXT-S	16*	.79*	_	_	_	_	_	_	
4. EXT-P	15*	.81*	.27*	_	_	_	_	_	
5. DS	11	.14	.07	.15	_	_	_	_	
6. SQ	.38*	10	11	05	09	_	_	_	
7. MGBS	.42*	04	06	01	01	.55*	_	_	
8. XTBS	.58*	22*	17*	19*	16*	.59*	.73*	<del>-</del>	

*Note.* INT = Intrinsic/Extrinsic-Revised- Intrinsic; EXT = Intrinsic/Extrinsic- Extrinsic; EXT-S = Extrinsic- Social subfactor; EXT-P = Extrinsic- Personal subfactor; DS = Dualism Scale; SQ = Sacred Qualities of the Body; MGBS = Manifestation of God in the Body; XTBS = Christian Teachings on the Body, \* p < .008.

## **Twelfth Hypothesis**

Finally, it was hypothesized that sanctification and radical dualism, as attitudes directly related to the body, would be related to experiences of the body above and beyond the more general constructs of religious commitment and intrinsic/extrinsic religiosity. This hypothesis was supported. A series of hierarchical regressions was run with the measures of religious commitment and intrinsic/extrinsic religiosity entered in the first block. Either the measure of radical dualism or the three measures of sanctification were entered in the second block, with the measures for each of the outcome variables, both body attitudes and body experiences, entered as the dependent variables. Results for regressions using the measure of radical dualism are shown in Tables 50 (body attitudes) and 51 (body experiences); results for regressions using the sanctification measures are shown in Tables 52 (body attitudes) and 53 (body experiences). A Bonferroni correction was calculated by dividing .05 by the number of analyses run: seven for body attitudes and nine for body experiences. The resulting cutoff values were p < .007 for body attitudes and p < .006 for body experiences.

Table 50

Dualism Predicting Body Attitude Measures Beyond Religious Commitment and Intrinsic/Extrinsic Religiosity

Variable	β	р	$\Delta R^2$	F	р
Body Areas Satisfaction S	Subscale				
Step 1			.06	5.01	.00
RelCom	.15	.13			
INT	.10	.33			
EXT	04	.59			
Step 2			.01	2.84	.09
RelCom	.13	.19			
INT	.10	.30			
EXT	02	.72			
Dualism	11	.09			
Body Esteem-Appearance					
Step 1			.03	2.10	.10
RelCom	.10	.35			
INT	.06	.58			
EXT	05	.44			
Step 2			.00	0.25	.62
RelCom	.09	.39		3.25	
INT	.06	.57			
EXT	05	.48			
Dualism	03	.62			

*Note.* RelCom = Religious Commitment Inventory; INT = Intrinsic/Extrinsic-Intrinsic; EXT = Intrinsic/Extrinsic-Extrinsic.

Table 50 (continued)

β	р	$\Delta R^2$	F	p
		.09	7.98	.00
.18	.07			
.11	.25			
09	.17			
		.04	10.48	.01
.14	.16			
.12	.20			
07	.30			
20	.001			
ness- Survei	llance			
		.04	2.90	.04
09	.38			
		.01	1.71	.19
07	.05			• • • • • • • • • • • • • • • • • • • •
	.18 .11 09 .14 .12 07 20	.18 .07 .11 .25 09 .17 .14 .16 .12 .20 07 .30 20 .001 mess- Surveillance 09 .38 .00 .97 .15 .02 07 .05 00 .99 .14 .03	.09 .18 .07 .11 .2509 .17 .04 .14 .16 .12 .2007 .3020 .001  mess- Surveillance .0409 .38 .00 .97 .15 .02 .0107 .0500 .99 .14 .03	.09 7.98 .18 .07 .11 .2509 .17 .04 10.48 .14 .16 .12 .2007 .3020 .001  mess- Surveillance .04 2.9009 .38 .00 .97 .15 .02 .01 1.7107 .0500 .99 .14 .03

*Note.* RelCom = Religious Commitment Inventory; INT = Intrinsic/Extrinsic-Intrinsic; EXT = Intrinsic/Extrinsic-Extrinsic.

Table 50 (continued)

Variable	β	p	$\Delta R^2$	F	р
O1: UC 1D 1 C	C1				
Objectified Body Conscio	ousness- Shame				
Step 1			.07	5.86	.00
RelCom	27	.01			
INT	.11	.27			
EXT	.14	.03			
Step 2			.04	11.52	.00
RelCom	23	.02			
INT	.10	.32			
EXT	.12	.07			
Dualism	.21	.00			
Body Image Guilt and Sh	iame Scale- Sha	ıme			
Step 1			.02	1.35	.26
RelCom	08	.42			
INT	01	.89			
EXT	.07	.27			
Step 2			.02	4.34	.04
RelCom	06	.59			
INT	02	.83			
EXT	.06	.38			
Dualism					
Dualism	.14	.04			

*Note.* RelCom = Religious Commitment Inventory; INT = Intrinsic/Extrinsic-Intrinsic; EXT = Intrinsic/Extrinsic-Extrinsic.

Table 50 (continued)

Variable	β	р	$\Delta R^2$	F	р
Body Image Guilt and Sh	iame Scale- Gui	ilt			
Step 1			.70	0.70	.56
RelCom	15	.15			
INT	.12	.23			
EXT	01	.91			
Step 2			.01	1.58	.21
RelCom	13	.21			
INT	.12	.25			
EXT	02	.80			
Dualism	.08	.21			

*Note.* RelCom = Religious Commitment Inventory; INT = Intrinsic/Extrinsic-Intrinsic; EXT = Intrinsic/Extrinsic-Extrinsic.

Table 51

Dualism Predicting Body Experience Measures Beyond Religious Commitment and Intrinsic/Extrinsic Religiosity

Variable	β	р	$\Delta R^2$	F	р
Depersonalization					
Step 1			.04	3.02	.03
RelCom	07	.51			
INT	10	.33			
EXT	.09	.19			
Step 2			.02	5.73	.02
RelCom	04	.72			
INT	11	.29			
EXT	.07	.29			
Dualism	.16	.02			
Somatization					
Step 1			.02	1.54	.21
RelCom	.11	.31			
INT	.03	.77			
EXT	03	.63			
Step 2			.00	0.28	.60
RelCom	.10	.35			
INT	.03	.75			
EXT	03	.67			
Dualism	04	.60			

*Note.* RelCom = Religious Commitment Inventory; INT = Intrinsic/Extrinsic-Intrinsic; EXT = Intrinsic/Extrinsic-Extrinsic.

Table 51 (continued)

Variable	β	p	$\Delta R^2$	F	p
Body Awareness Questic	onnaire				
Step 1			.12	9.59	.00
RelCom	07	.47			
INT	.40	.00			
EXT	.05	.49			
Step 2			.00	0.02	.89
RelCom	07	.47			
INT	.40	.00			
EXT	.05	.48			
Dualism	01	.89			
Body Experience Question	onnaire- Aliena	tion			
Step 1			.10	7.90	.00
RelCom	07	.51			
INT	19	.07			
EXT	16	.02			
Step 2			.06	16.36	.00
RelCom	02	.86			
INT	20	.04			
EXT	.13	.05			
Dualism	.26	.00			

*Note.* RelCom = Religious Commitment Inventory; INT = Intrinsic/Extrinsic-Intrinsic; EXT = Intrinsic/Extrinsic-Extrinsic.

Table 51 (continued)

Variable	β	р	$\Delta R^2$	F	р
Body Experience Question	nnaire- Harmo	ony			
Step 1			.10	7.73	.00
RelCom	.22	.03			
INT	.10	.33			
EXT	04	.54			
Step 2			.00	0.62	.43
RelCom	.21	.05			
INT	.10	.32			
EXT	04	.60			
Dualism	05	.43			
Difficulties in Emotion I	Regulation- Aw	vareness			
Step 1		, .,,,,,,	.03	2.67	.05
RelCom	.00	1.00	,,,,		•••
INT	19	.70			
EXT	04	.54			
Step 2	.04	.01	.00	0.05	.83
RelCom	.00	.10	.00	0.05	.03
INT	19	.07			
EXT	04	.53			
Dualism	.02	.83			

*Note.* RelCom = Religious Commitment Inventory; INT = Intrinsic/Extrinsic-Intrinsic; EXT = Intrinsic/Extrinsic-Extrinsic.

Table 51 (continued)

Variable	β	р	$\Delta R^2$	F	p
	•	•			•
Difficulties in Emotion I	Regulation- Clar	rity			
Step 1			.06	4.38	.01
RelCom	.02	.83			
INT	25	.02			
EXT	.02	.75			
Step 2			.01	2.71	.10
RelCom	.04	.67			
INT	25	.01			
EXT	.01	.89			
Dualism	.11	.10			
Sexual Consciousness Si	ıbscale				
Step 1			.08	6.12	.00
RelCom	.21	.05			
INT	.05	.62			
EXT	09	.19			
Step 2			.00	0.24	.63
RelCom	.21	.04			
INT	.05	.63			
EXT	09	.18			
Dualism	.03	.63			

 $Note.\ RelCom = Religious\ Commitment\ Inventory;\ INT = Intrinsic/Extrinsic-Intrinsic;\ EXT = Intrinsic/Extrinsic-Extrinsic.$ 

Table 51 (continued)

Variable	β	p	$\Delta R^2$	F	p
Sexual Monitoring Subs	cale				
Step 1			.04	3.20	.02
RelCom	.09	.42			
INT	.06	.58			
EXT	13	.06			
Step 2			.02	4.17	.04
RelCom	.06	.58			
INT	.07	.52			
EXT	11	.10			
Dualism	14	.04			

*Note.* RelCom = Religious Commitment Inventory; INT = Intrinsic/Extrinsic-Intrinsic; EXT = Intrinsic/Extrinsic-Extrinsic.

Table 52

Sanctification Predicting Body Attitude Measures Beyond Religious Commitment and Intrinsic/Extrinsic Religiosity

Variable	β	р	$\Delta R^2$	F	p
Body Areas Satisfaction S	Subscale				
Step 1	нозсин		.06	5.01	.00
RelCom	.15	.13	.00	5.01	.00
INT	.10	.33			
EXT		.59			
	04	.39	02	1.66	02*
Step 2	1.5	10	.02	4.66	.03*
RelCom	.15	.13			
INT	.04	.67			
EXT	03	.63			
SQ	.15	.03			
MGBS	.02	.85			
XNTB	.12	.22			
D 1 E 1					
Body Esteem-Appearance			0.0	2.10	4.0
Step 1			.03	2.10	.10
RelCom	.10	.35			
INT	.06	.58			
EXT	05	.44			
Step 2			.00	0.35	.55
RelCom	.09	.37			
INT	.04	.69			
EXT	05	.45			
SQ	.04	.55			
MGBS	01	.90			

*Note.* RelCom = Religious Commitment Inventory; INT = Intrinsic/Extrinsic-Intrinsic; EXT = Intrinsic/Extrinsic-Extrinsic; SQ = Sacred Qualities of the Body; MGBS = Manifestation of God in the Body; XNTB = Christian Teachings on the Body.

Table 52 (continued)

Sanctification Predicting Body Attitude Measures Beyond Religious Commitment and Intrinsic/Extrinsic Religiosity

Variable	β	р	$\Delta R^2$	F	р
Body Appreciation Scale					
Step 1			.09	7.98	.00
RelCom	.18	.07	.02	7.70	.00
INT	.11	.25			
EXT	09	.17			
Step 2	•••	• • • • • • • • • • • • • • • • • • • •	.03	7.04	.01
RelCom	.18	.14			
INT	.05	.08			
EXT	08	.62			
SQ	.18	.01			
MGBS	05	.56			
XNTB	.24	.02			
Objectified Body Consciousr Step 1	ıess- Surveil	llance	.04	2.90	.04
RelCom	09	.38			
INT	.00	.97			
EXT	.15	.02			
Step 2			.00	0.19	.66
Step 2 RelCom	09	.39	.00	0.19	.66
-		.39 .89	.00	0.19	.66
RelCom	09		.00	0.19	.66
RelCom INT	09 .02	.89	.00	0.19	.66
INT EXT	09 .02 .15	.89 .02	.00	0.19	.66

*Note.* RelCom = Religious Commitment Inventory; INT = Intrinsic/Extrinsic-Intrinsic; EXT = Intrinsic/Extrinsic-Extrinsic; SQ = Sacred Qualities of the Body; MGBS = Manifestation of God in the Body; XNTB = Christian Teachings on the Body.

Table 52 (continued)

Sanctification Predicting Body Attitude Measures Beyond Religious Commitment and Intrinsic/Extrinsic Religiosity

Variable	β	р	$\Delta R^2$	F	р
Objectified Body Consci	ousness- Shame				
Step 1			.07	5.86	.00
RelCom	27	.01			
INT	.11	.27			
EXT	.14	.03			
Step 2			.00	0.76	.39
RelCom	27	.01			
INT	.13	.20			
EXT	.14	.03			
SQ	06	.39			
MGBS	01	.92			
XNTB	13	.19			
Body Image Guilt and S. Step 1	hame Scale- Sha	me	.02	1.25	.26
RelCom	08	.42			
INT	01	.89			
	01	.07			
EXT	.07	.27			
EXT Step 2			.01	1.29	.26
			.01	1.29	.26
Step 2	.07	.27	.01	1.29	.26
Step 2 RelCom	.07 08	.27	.01	1.29	.26
Step 2 RelCom INT	.07 08 .02	.27 .43 .89	.01	1.29	.26
Step 2 RelCom INT EXT	.07 08 .02 .07	.27 .43 .89 .28	.01	1.29	.26

*Note.* RelCom = Religious Commitment Inventory; INT = Intrinsic/Extrinsic-Intrinsic; EXT = Intrinsic/Extrinsic-Extrinsic; SQ = Sacred Qualities of the Body; MGBS = Manifestation of God in the Body; XNTB = Christian Teachings on the Body.

Table 52 (continued)

Sanctification Predicting Body Attitude Measures Beyond Religious Commitment and Intrinsic/Extrinsic Religiosity

Variable	β	p	$\Delta R^2$	F	р
	•				,
Body Image Guilt and Sh	name Scale- Gu	ilt			
Step 1			.01	0.70	.56
RelCom	15	.15			
INT	.12	.23			
EXT	01	.91			
Step 2			.01	1.21	.27
RelCom	15	.15			
INT	.10	.36			
EXT	01	.94			
SQ	.08	.27			
MGBS	05	.60			
XNTB	.02	.87			

*Note.* Inventory; INT = Intrinsic/Extrinsic-Intrinsic; EXT = Intrinsic/Extrinsic-Extrinsic; SQ = Sacred Qualities of the Body; MGBS = Manifestation of God in the Body; XNTB = Christian Teachings on the Body.

Table 53

Sanctification Predicting Body Experience Measures Beyond Religious Commitment and Intrinsic/Extrinsic Religiosity

Variable	β	р	$\Delta R^2$	F	р
Depersonalization					
Step 1			.04	3.02	.03
RelCom	07	.51			
INT	10	.33			
EXT	.09	.19			
Step 2			.00	0.01	.94
RelCom	07	.51			
INT	10	.34			
EXT	.09	.19			
SQ	.01	.94			
MGBS	12	.17			
XNTB	18	.09			
Somatization					
Step 1			.02	1.54	.21
RelCom	.11	.31			
INT	.03	.77			
EXT	03	.63			
Step 2			.02	5.01	.03
RelCom	.10	.32			
INT	03	.80			
EXT	03	.67			
SQ	.16	.03			
MGBS	.04	.69			
XNTB	01	.92			

*Note.* RelCom = Religious Commitment Inventory; INT = Intrinsic/Extrinsic-Intrinsic; EXT = Intrinsic/Extrinsic-Extrinsic; SQ = Sacred Qualities of the Body; MGBS = Manifestation of God in the Body; XNTB = Christian Teachings on the Body.

Table 53 (continued)

Variable	β	р	$\Delta R^2$	F	р
Body Awareness Questio	nunairo				
Step 1	Tituite		.12	9.59	.00
RelCom	07	.47	.12	J.07	.00
INT	.40	.00			
EXT	.05	.49			
Step 2	.00	.17	.01	3.11	.08
RelCom	08	.45	.01	0.11	.00
INT	.35	.00			
EXT	.05	.45			
SQ	.12	.08			
MGBS	.16	.07			
XNTB	.01	.94			
Body Experience Question	onnaire- Alienai	tion			
Step 1			.10	7.90	.00
RelCom	07	.51			
INT	19	.07			
EXT	.16	.02			
Step 2			.02	5.51	.02
RelCom	06	.53			
INT	13	.22			
INT EXT		.22 .02			
	13				
EXT	13 .15	.02			

*Note.* RelCom = Religious Commitment Inventory; INT = Intrinsic/Extrinsic-Intrinsic; EXT = Intrinsic/Extrinsic-Extrinsic; SQ = Sacred Qualities of the Body; MGBS = Manifestation of God in the Body; XNTB = Christian Teachings on the Body.

Table 53 (continued)

Variable	β	р	$\Delta R^2$	F	р
Body Experience Question	onnaire- Harmo	านน			
Step 1		Jug	.10	7.73	.00
RelCom	.22	.03	***		•••
INT	.10	.33			
EXT	04	.54			
Step 2			.01	1.31	.25
RelCom	.22	.04			
INT	.07	.51			
EXT	04	.56			
SQ	.08	.25			
MGBS	.01	.90			
XNTB	.25	.02			
Difficulties in Emotion 1	Regulation- Au	vareness			
Step 1			.03	2.67	.05
RelCom	.00	1.00			
INT	19	.10			
EXT	04	.54			
Step 2			.01	2.50	.12
RelCom	.00	.98			
INT	15	.16			
EXT	04	.51			
SQ	11	.12			
	11 16	.12 .08			

*Note.* RelCom = Religious Commitment Inventory; INT = Intrinsic/Extrinsic-Intrinsic; EXT = Intrinsic/Extrinsic-Extrinsic; SQ = Sacred Qualities of the Body; MGBS = Manifestation of God in the Body; XNTB = Christian Teachings on the Body.

Table 53 (continued)

Variable	β	р	$\Delta R^2$	F	р
Difficulties in Emotion I	Regulation- Clai	rity			
Step 1			.06	4.38	.01
RelCom	.02	.83			
INT	25	.02			
EXT	.02	.75			
Step 2			.01	2.73	.10
RelCom	.03	.81			
INT	20	.05			
EXT	.02	.79			
SQ	12	.10			
MGBS	16	.08			
XNTB	19	.07			
Sexual Monitoring Subs	cale				
Step 1			.04	3.20	.02
RelCom	.09	.42			
INT	.06	.58			
EXT	13	.06			
Step 2			.00	0.24	.63
RelCom	.09	.41			
INT	.07	.51			
EXT	13	.06			
SQ	04	.63			
50	·				
MGBS	.05	.63			

*Note.* RelCom = Religious Commitment Inventory; INT = Intrinsic/Extrinsic-Intrinsic; EXT = Intrinsic/Extrinsic-Extrinsic; SQ = Sacred Qualities of the Body; MGBS = Manifestation of God in the Body; XNTB = Christian Teachings on the Body.

Table 53 (continued)

Sanctification Predicting Body Experience Measures Beyond Religious Commitment and Intrinsic/Extrinsic Religiosity

Variable	β	p	$\Delta R^2$	F	р
Sexual Consciousness St	ubscale				
Step 1			.08	6.12	.00
RelCom	.21	.05			
INT	.05	.62			
EXT	09	.19			
Step 2			.00	0.00	.98
RelCom	.21	.05			
INT	.05	.63			
EXT	09	.19			
SQ	.00	.98			
MGBS	.12	.18			
XNTB	.06	.57			

*Note.* RelCom = Religious Commitment Inventory; INT = Intrinsic/Extrinsic-Intrinsic; EXT = Intrinsic/Extrinsic-Extrinsic; SQ = Sacred Qualities of the Body; MGBS = Manifestation of God in the Body; XNTB = Christian Teachings on the Body.

### **Body Attitudes**

Over and above the more general religious constructs, radical dualism predicted body satisfaction, as measured by the Body Appreciation Scale ( $\beta$  = - .20, p < .001). Dualism also significantly predicted body shame, as measured by the Objectified Body Consciousness- Shame subscale ( $\beta$  = .21, p = .001). Dualism was not significantly correlated with the measures of body objectification or

body guilt. None of the sanctification scales significantly predicted any of the body attitudes measures over and above the more general religious constructs.

## **Body Experiences**

Radical dualism significantly predicted lack of body awareness, as measured by the Body Experience Questionnaire- Alienation subscale ( $\beta$  = .26, p < .001). Dualism did not significantly predict depersonalization, somatization, difficulties in emotion awareness, or sexuality awareness. None of the sanctification scales significantly predicted any of the body experience measures above and beyond the more general religious constructs when entered together into the second step of the regression.

### **Post Hoc Analyses**

In order to explore whether or not age impacted the results of these regressions, an additional set of regressions was run, with age added separately in the first block, followed by religious commitment and intrinsic/extrinsic religiosity in the second block and the measures of either radical dualism or sanctification in the third block. Each measure of either body attitudes or body experiences was entered as the dependent variable. A Bonferroni correction was calculated by dividing .05 by the number of analyses run: seven for body attitudes and nine for body experiences. The resulting cutoff values were p < .007

for body attitudes and p < .006 for body experiences. Results for dualism are shown in Tables 54 and 55; results for sanctification are shown in Tables 56 and 57. None of the regressions for either radical dualism or sanctification were significant.

Table 54

Dualism Predicting Body Attitude Measures Beyond Age, Religious Commitment and Intrinsic/Extrinsic Religiosity

Variable	β	р	$\Delta R^2$	F	р
	Г	<u> </u>			Г
Body Areas Satisfaction	Subscale				
Step 1			.00	.17	.68
Age	.03	.68			
Step 2			.06	4.71	.00
Age	04	.57			
RelCom	.17	.12			
INT	.09	.37			
EXT	04	.59			
Step 3			.01	2.71	.10
Age	04	.52			
RelCom	.15	.17			
INT	.10	.33			
EXT	02	.72			
Dualism	11	.10			
Pada Patana Amagnasa					
Body Esteem-Appearance Stop 1	e		.01	1.51	.22
Step 1	00	22	.01	1.51	,22
Age	.08	.22	02	1 50	20
Step 2	0.4	F2	.02	1.58	.20
Age	.04	.53			
RelCom	.08	.46			
INT	.06	.57			
EXT	05	.47	0.0	0.01	<b></b>
Step 3	2.4	- 4	.00	0.21	.65
Age	.04	.54			
RelCom	.08	.49			
INT	.06	.56			
EXT	05	.50			
Dualism	03	.65			

Table 54 (continued)

Variable	β	p	$\Delta R^2$	F	р
	<u> </u>				ı
Body Appreciation Scale					
Step 1			.05	11.66	.001
Age	.22	.001			
Step 2			.07	5.37	.001
Age	.16	.02			
RelCom	.13	.23			
INT	.12	.22			
EXT	08	.21			
Step 3			.04	9.41	.002
Age	.15	.02			
RelCom	.09	.38			
INT	.13	.17			
EXT	06	.34			
Dualism	20	.002			
Objectified Body Consciou	sness- Survei	llance			
Step 1			.06	15.02	.00
Age	25	.00			
Step 2			.02	1.80	.15
Age	23	.001			
RelCom	01	.91			
INT	01	.91			
	.01				
EXT	.15	.03			
EXT Step 3		.03	.01	1.37	.24
		.03	.01	1.37	.24
Step 3	.15		.01	1.37	.24
Step 3 Age	.15 23	.001	.01	1.37	.24
Step 3 Age RelCom	.15 23 .00	.001 .99	.01	1.37	.24

Table 54 (continued)

Variable	β	p	$\Delta R^2$	F	p
01: :::: 1.D. 1. C.	. 01				
Objectified Body Cons	sciousness- Shame		0.4		4.0
Step 1			.01	2.50	.12
Age	11	.12			
Step 2			.06	4.74	.00
Age	04	.55			
RelCom	26	.01			
INT	.11	.30			
EXT	.14	.04			
Step 3			.04	10.65	.001
Age	03	.62			
RelCom	22	.03			
INT	.10	.34			
EXT	.12	.08			
Dualism	.21	.001			
Body Image Guilt and	l Shame Scale- Sha	me			
Step 1			.09	20.85	.00
Age	29	.00			
Step 2	>	.00	.01	.42	.74
Age	28	.00	.01	• • •	•, 1
RelCom	.01	.92			
INT	03	.75			
EXT	.06	.33			
Step 3	.00	.55	.02	3.74	.06
-	28	.00	.02	J.7 <del>1</del>	.00
Age RelCom	.03	.00 .75			
INT	04	.69			
EXT	.05	.45			
Dualism	.13	.06			

Table 54 (continued)

Variable	β	p	$\Delta R^2$	F	p
Body Image Guilt and Sl	hame Scale- Gu	ilt			
Step 1			.03	6.46	.01
Age	17	.01			
Step 2			.01	0.41	.75
Age	17	.02			
RelCom	09	.39			
INT	.11	.28			
EXT	01	.85			
Step 3			.01	1.30	.26
Age	16	.02			
RelCom	08	.46			
INT	.11	.30			
EXT	02	.75			
Dualism	.08	.26			

Table 55

Dualism Predicting Body Experience Measures Beyond Age, Religious Commitment and Intrinsic/Extrinsic Religiosity

Variable	β	p	$\Delta R^2$	F	р
	r	<u> </u>		<del>-</del>	Г
Depersonalization					
Step 1			.01	2.84	.09
Age	11	.09			
Step 2			.03	2.38	.07
Age	07	.30			
RelCom	04	.68			
INT	11	.31			
EXT	.09	.20			
Step 3			.02	5.47	.02
Age	07	.33			
RelCom	02	.88			
INT	11	.27			
EXT	.07	.31			
Dualism	.16	.02			
0					
Somatization			0.4		
Step 1			.01	2.58	.11
Age	.11	.11			
Step 2			.01	1.05	.37
Age	.08	.29			
RelCom	.08	.45			
INT	.04	.73			
EXT	03	.66			
Step 2			.00	0.24	.63
Age	.07	.30			
RelCom	.08	.48			
INT	.04	.72			
EXT	03	.70			
Dualism	03	.63			

Table 55 (continued)

<i>Intrinsic/Extrinsic R</i> Variable	β	n	$\Delta R^2$	F	n
Variable	Ρ	p		1	р
Body Awareness Qu	estionnaire				
Step 1			.00	.01	.93
Age	.01	.93			
Step 2			.12	9.71	.00
Age	05	.46			
RelCom	06	.59			
INT	.39	.00			
EXT	.04	.50			
Step 3			.00	0.03	.86
Age	05	.46			
RelCom	06	.58			
INT	.40	.00			
EXT	.05	.50			
Dualism	01	.86			
Body Experience Qu	estionnaire- Alienat	tion			
Step 1			.04	7.88	.01
Age	19	.01			
Step 2			.08	6.42	.00
Age	13	.06			
RelCom	03	.81			
INT	20	.05			
EXT	.15	.02			
Step 3		-	.06	15.96	.00
1	12	.07			
Age					
Age RelCom	.02	.84			
•		.84 .03			
RelCom	.02				

Table 55 (continued)

Variable	β	р	$\Delta R^2$	F	р
	<u> </u>	<u> </u>			<u> </u>
Body Experience Que	stionnaire- Harmo	пу			
Step 1			.02	3.54	.06
Age	.13	.06			
Step 2			.08	6.60	.00
Age	.05	.49			
RelCom	.20	.05			
INT	.10	.32			
EXT	04	.56			
Step 3			.00	0.57	.45
Age	.05	.51			
RelCom	.19	.07			
INT	.11	.31			
EXT	03	.61			
Dualism	05	.45			
Difficulties in Emotio	n Regulation- Awi	areness			
Step 1			.00	.75	.39
Age	06	.39			
Step 2			.03	2.36	.07
Age	03	.68			
RelCom	.01	.93			
INT	19	.07			
EXT	04	.54			
			.00	0.04	.84
Step 3					
Step 3 Age	03	.69			
-	03 .01	.69 .10			
Age					
Age RelCom	.01	.10			

Table 55 (continued)

Variable	β	р	$\Delta R^2$	F	р
	I				ı
Difficulties in Emotion	Regulation- Cla	rity			
Step 1			.02	4.61	.03
Age	14	.03			
Step 2			.05	3.53	.02
Age	11	.11			
RelCom	.06	.58			
INT	25	.02			
EXT	.02	.80			
Step 3			.01	2.44	.12
Age	11	.12			
RelCom	.08	.47			
INT	26	.01			
EXT	.01	.93			
Dualism	.10	.12			
Sexual Consciousness S	ubscale		0.5		
Step 1			.02	4.38	.04
Age	.14	.04			
Step 2			.06	4.95	.00
Age	.07	.30			
RelCom	.18	.08			
INT	.06	.58			
EXT	09	.20			
Step 3			.00	0.28	.60
Age	.07	.29			
RelCom	.19	.08			
INT	.05	.60			
EXT	09	.19			
Dualism	.04	.60			

Table 55 (continued)

Variable	β	р	$\Delta R^2$	F	р
Sexual Monitoring Subsc	cale				
Step 1			.05	10.97	.00
Age	.22	.00			
Step 2			.03	2.09	.10
Age	.19	.01			
RelCom	.02	.82			
INT	.07	.49			
EXT	12	.07			
Step 3			.02	3.88	.05
Age	.18	.09			
RelCom	.00	1.00			
INT	.08	.44			
EXT	11	.11			
Dualism	13	.05			

Table 56

Sanctification Predicting Body Attitude Measures Beyond Age, Religious Commitment and Intrinsic/Extrinsic Religiosity

Variable	β	p	$\Delta R^2$	F	p
	·				· · · · · · · · · · · · · · · · · · ·
Body Areas Satisfaction	Subscale				
Step 1			.00	.17	.68
Age	.03	.68			
Step 2			.06	4.71	.003
Age	04	.57			
RelCom	.17	.12			
INT	.09	.37			
EXT	04	.59			
Step 3			.03	1.95	.12
Age	04	.53			
RelCom	.14	.19			
INT	.01	.90			
EXT	03	.72			
SQ	.10	.25			
MGBS	.02	.85			
XNTB	.10	.38			

*Note.* RelCom = Religious Commitment Inventory; INT = Intrinsic/Extrinsic-Intrinsic; EXT = Intrinsic/Extrinsic-Extrinsic; SQ = Sacred Qualities of the Body; MGBS = Manifestation of God in the Body; XNTB = Christian Teachings on the Body.

Table 56 (continued)

Variable	β	р	$\Delta R^2$	F	р
Body Esteem-Appearance					
Step 1			.01	1.51	.22
Age	.08	.22			
Step 1			.02	1.58	.20
Age	.04	.53			
RelCom	.08	.46			
INT	.06	.57			
EXT	05	.47			
Step 2			.01	0.55	.65
Age	.04	.54			
RelCom	.06	.60			
INT	.02	.87			
EXT	04	.60			
SQ	01	.95			
MGBS	01	.91			
XNTB	.12	.31			

*Note.* RelCom = Religious Commitment Inventory; INT = Intrinsic/Extrinsic-Intrinsic; EXT = Intrinsic/Extrinsic-Extrinsic; SQ = Sacred Qualities of the Body; MGBS = Manifestation of God in the Body; XNTB = Christian Teachings on the Body.

Table 56 (continued)

Variable	β	р	$\Delta R^2$	F	р
Body Appreciation Scale					
Step 1			.05	11.66	.001
Age	.22	.001			
Step 2			.07	5.37	.001
Age	.16	.02			
RelCom	.13	.23			
INT	.12	.22			
EXT	08	.21			
Step 2			.04	3.58	.02
Age	.15	.02			
RelCom	.09	.40			
INT	.02	.86			
EXT	05	.42			
SQ	.11	.17			
MGBS	07	.48			
XNTB	.22	.05			

*Note.* RelCom = Religious Commitment Inventory; INT = Intrinsic/Extrinsic-Intrinsic; EXT = Intrinsic/Extrinsic-Extrinsic; SQ = Sacred Qualities of the Body; MGBS = Manifestation of God in the Body; XNTB = Christian Teachings on the Body.

Table 56 (continued)

Variable	β	р	$\Delta R^2$	F	p
Objectified Body Conscio	ousness- Survei	llance			
Step 1			.06	15.02	.000
Age	25	.000			
Step 2			.02	1.80	.15
Age	23	.001			
RelCom	01	.91			
INT	01	.91			
EXT	.15	.03			
Step 3			.01	0.65	.58
Age	23	.001			
RelCom	01	.91			
INT	01	.95			
EXT	.16	.02			
SQ	01	.94			
MGBS	13	.18			
XNTB	.10	.39			

*Note.* RelCom = Religious Commitment Inventory; INT = Intrinsic/Extrinsic-Intrinsic; EXT = Intrinsic/Extrinsic-Extrinsic; SQ = Sacred Qualities of the Body; MGBS = Manifestation of God in the Body; XNTB = Christian Teachings on the Body.

Table 56 (continued)

Variable	β	p	$\Delta R^2$	F	p
Objectified Body Conscio	ousness- Shame				
Step 1			.01	2.50	.12
Age	11	.12			
Step 2			.06	4.74	.003
Age	04	.55			
RelCom	26	.01			
INT	.11	.30			
EXT	.14	.04			
Step 2			.01	0.73	.54
Age	04	.57			
RelCom	24	.03			
INT	.16	.15			
EXT	.13	.07			
SQ	01	.90			
MGBS	.01	.95			
XNTB	12	.30			

Table 56 (continued)

Variable	β	р	$\Delta R^2$	F	р
Body Image Guilt and SI	hame Scale- Sha	mo			
Step 1	ume Scale- Sha	IIIC	.09	20.85	.00
Age	29	.00	.07	20.00	.00
Step 2			.01	.42	.74
Age	28	.00			
RelCom	.01	.92			
INT	03	.75			
EXT	.06	.33			
Step 3			.02	1.63	.18
Age	28	.00			
RelCom	.02	.84			
INT	.001	.99			
EXT	.08	.23			
SQ	02	.77			
MGBS	19	.06			
XNTB	.08	.46			

*Note.* RelCom = Religious Commitment Inventory; INT = Intrinsic/Extrinsic-Intrinsic; EXT = Intrinsic/Extrinsic-Extrinsic; SQ = Sacred Qualities of the Body; MGBS = Manifestation of God in the Body; XNTB = Christian Teachings on the Body.

Table 56 (continued)

Variable	β	p	$\Delta R^2$	F	p
Body Image Guilt and Sl	hame Scale- Gu	ilt			
Step 1			.03	6.46	.01
Age	17	.01			
Step 2			.01	0.41	.75
Age	17	.02			
RelCom	09	.39			
INT	.11	.28			
EXT	01	.85			
Step 3			.01	.75	.53
Age	17	.02			
RelCom	08	.45			
INT	.10	.39			
EXT	01	.94			
SQ	.12	.17			
MGBS	08	.41			
XNTB	.00	.98			

Table 57

Sanctification Predicting Body Experience Measures Beyond Age, Religious Commitment and Intrinsic/Extrinsic Religiosity

Variable	β	p	$\Delta R^2$	F	р
Depersonalization					
Step 1			.01	2.84	.09
Age	11	.09			
Step 2			.03	2.38	.07
Age	07	.30			
RelCom	04	.68			
INT	11	.31			
EXT	.09	.20			
Step 3			.04	3.21	.02
Age	07	.30			
RelCom	.01	.93			
INT	05	.66			
EXT	.08	.24			
SQ	.14	.09			
MGBS	14	.15			
XNTB	16	.15			

*Note.* Inventory; INT = Intrinsic/Extrinsic-Intrinsic; EXT = Intrinsic/Extrinsic-Extrinsic; SQ = Sacred Qualities of the Body; MGBS = Manifestation of God in the Body; XNTB = Christian Teachings on the Body.

Table 57 (continued)

Variable	β	р	$\Delta R^2$	F	р
Somatization					
Step 1			.01	2.58	.11
Age	.11	.11			
Step 2			.01	1.05	.37
Age	.08	.29			
RelCom	.08	.45			
INT	.04	.73			
EXT	03	.66			
Step 3			.02	1.67	.18
Age	.07	.31			
RelCom	.08	.45			
INT	02	.88			
EXT	03	.64			
SQ	.16	.07			
MGBS	.04	.69			
XNTB	04	.72			

Table 57 (continued)

Variable	β	р	$\Delta R^2$	F	р
Body Awareness Questic	nnaire				
Step 1			.00	.01	.93
Age	.01	.93			
Step 2			.12	9.71	.00
Age	05	.46			
RelCom	06	.59			
INT	.39	.00			
EXT	.04	.50			
Step 3			.03	2.15	.10
Age	05	.42			
RelCom	08	.46			
INT	.33	.002			
EXT	.04	.59			
SQ	.06	.46			
MGBS	.15	.12			
XNTB	02	.88			

Table 57 (continued)

Variable	β	p	$\Delta R^2$	F	р
Body Experience Questic	onnaire- Aliena	tion			
Step 1			.04	7.88	.01
Age	19	.01			
Step 2			.08	6.42	.00
Age	13	.06			
RelCom	03	.81			
INT	20	.05			
EXT	.15	.02			
Step 3			.05	3.82	.01
Age	13	.06			
RelCom	.02	.86			
INT	09	.37			
EXT	.14	.03			
SQ	06	.49			
MGBS	12	.22			
XNTB	12	.30			

Table 57 (continued)

Variable	β	p	$\Delta R^2$	F	p
Body Experience Question	onnaire- Harmo	пу			
Step 1			.02	3.54	.06
Age	.13	.06			
Step 2			.08	6.60	.00
Age	.05	.49			
RelCom	.20	.05			
INT	.10	.32			
EXT	04	.56			
Step 3			.03	2.26	.08
Age	.05	.51			
RelCom	.16	.14			
INT	.02	.84			
EXT	02	.80			
SQ	02	.86			
MGBS	.00	.97			
XNTB	.22	.06			

Table 57 (continued)

Variable	β	p	$\Delta R^2$	F	р
Difficulties in Emotion F	Regulation- Aw	areness			
Step 1			.003	.75	.39
Age	06	.39			
Step 2			.03	2.36	.07
Age	03	.68			
RelCom	.01	.93			
INT	19	.07			
EXT	04	.54			
Step 3			.05	4.07	.01
Age	02	.72			
RelCom	.07	.54			
INT	09	.41			
EXT	05	.46			
SQ	.03	.75			
MGBS	15	.14			
XNTB	16	.16			

Table 57 (continued)

Variable	β	р	$\Delta R^2$	F	p
Difficulties in Emotion I	Regulation- Clar	rity			
Step 1			.02	4.61	.03
Age	14	.03			
Step 2			.05	3.53	.02
Age	11	.11			
RelCom	.06	.58			
INT	25	.02			
EXT	.02	.80			
Step 3			.02	1.92	.13
Age	11	.12			
RelCom	.09	.38			
INT	17	.11			
EXT	.003	.97			
SQ	04	.67			
MGBS	03	.76			
XNTB	15	.20			

Table 57 (continued)

Variable	β	р	$\Delta R^2$	F	р
Sexual Monitoring Subscale	2				
Step 1			.05	10.97	.001
Age	.22	.001			
Step 2			.03	2.09	.10
Age	.19	.01			
RelCom	.02	.82			
INT	.07	.49			
EXT	12	.07			
Step 3			.01	0.82	.49
Age	.19	.01			
RelCom	003	.98			
INT	.05	.62			
EXT	11	.10			
SQ	10	.22			
MGBS	.02	.80			
XNTB	.12	.30			

*Note.* RelCom = Religious Commitment Inventory; INT = Intrinsic/Extrinsic-Intrinsic; EXT = Intrinsic/Extrinsic-Extrinsic; SQ = Sacred Qualities of the Body; MGBS = Manifestation of God in the Body; XNTB = Christian Teachings on the Body.

Table 57 (continued)

Variable	β	р	$\Delta R^2$	F	р
Sexual Consciousness Si	ihscale				
Step 1	ioscuic		.02	4.38	.04
Age	.14	.04	.02	4.50	.04
Step 2			.06	4.95	.002
Age	.07	.30			
RelCom	.18	.08			
INT	.06	.58			
EXT	09	.20			
Step 3			.02	1.26	.29
Age	.07	.31			
RelCom	.15	.15			
INT	.03	.82			
EXT	09	.19			
SQ	08	.33			
MGBS	.13	.20			
XNTB	.05	.64			

### **CHAPTER 4**

#### DISCUSSION

This study explores the relationships between religiously-influenced attitudes toward the body and the ways in which people think about and experience their bodies. While some previous studies have examined the effects of religious beliefs on attitudes toward the body (Boyatzis et al., 2003; Boyatzis et al., 2007; Mahoney et al., 2005), this study is one of the first to examine specific ways in which people experience their bodies in relation to their religious beliefs (Jacobson, Hall, & Anderson, 2013). In particular, this study looked at radical dualism and sanctification in relation to four body attitudes (body satisfaction, body objectification, body shame, and body guilt) and five body experiences (depersonalization, somatization, sexual awareness, emotion regulation, and internal body awareness). Additionally, while most studies have tended to focus on religion in relation to women's attitudes about their bodies (Boyatzis et al., 2007; Boyatzis et al., 2006), this study was one of the first to include men and to

look specifically at how one's gender plays a role in how one experiences one's body.

# First and Second Hypotheses

As expected in the first hypothesis, radical dualism was negatively correlated with the attitude of body satisfaction and positively related to body shame. Radical dualism was positively correlated with the experiences of depersonalization and lack of internal body awareness. Viewing one's body as a separate part of oneself was thus linked to both negative body attitudes and negative experiences of the body. This study represents one of the first to examine links between radical dualism and attitudes or experiences of the body (Jacobson, 2011). It may be that people who view their bodies as a burden or as a separate part of oneself also disconnect themselves from their bodily sensations as a way of further distancing themselves from their bodies. Viewing one's body as a burden or as corrupt and sinful might result in pushing away or neglecting one's bodily sensations. Future qualitative research could explore these relationships in more detail; longitudinal research could also investigate how these relationships develop over time.

In the second hypothesis, sanctification predicted the attitude of body satisfaction and the experience of internal body awareness. Attributing both theistic and non-theistic sacred qualities to one's body was therefore linked to more positive evaluations and experiences of one's body. This supports previous research with college students which has demonstrated links between sanctification and body satisfaction (Jacobson et al., 2013; Mahoney et al., 2005) and expands on it by including participants who represent a wide range of ages. Along with body satisfaction, theistic and non-theistic sanctification were related to body awareness. It may be that people who sanctify their bodies are more likely to pay attention to their body sensations as a way of honoring and valuing their bodies. In contrast to what Jacobson et al. (2013) found, sanctification did not predict any of the other body attitudes or experiences. It is worth noting that the Bonferroni correction created a stringent cutoff value which impacted the number of significant results.

This study is the first to explore sanctification in relationship to experiences of the body. Future longitudinal research could explore links between religiously-influenced attitudes and body attitudes and experiences, particularly looking at how these relationships develop over time. Qualitative research would also be beneficial in exploring how individuals experience the

links between the ways they view their bodies and the ways they experience them. It would be especially beneficial to conduct qualitative and longitudinal research to look at the effect of age upon how religious attitudes impact how people experience their bodies.

# **Third Hypothesis**

The third hypothesis examined whether being a man or a woman influences the way in which one's religious attitudes about the body are related to how one experiences one's body. The only outcome variable in which this was found to be true was with somatization, suggesting that men and women may somaticize differently. It should be noted that these findings help to explain the previous hypothesis, which did not find significant links between sanctification and somatization. This indicates that there is a significant relationship between sanctification and somatization; however, the effect was hidden by the gender moderation. Men who reported higher theistic sanctification also reported higher levels of somatization; women who reported higher theistic sanctification reported lower levels of somatization. One possible reason for the different results between genders is that men and women may face different challenges regarding their bodies, as previous studies have indicated (Carlin, 2008;

Roothman et al., 2003; Siedler, 2007, Wilkins, 2009). Roothman et al. (2003) suggested that for women, increased body dissatisfaction could lead to increased body monitoring and awareness of somatic symptoms whereas men may be less likely to report genuine somatic symptoms because of a desire to conform to "masculine" standards of physical invulnerability. In the present study, it may be that even for religiously oriented men who view their bodies in more sanctified ways than other men, societal pressure to conform to a specific standard still impacts their awareness and reporting of somatic symptoms.

Another possibility for these findings is the way in which specific religious teachings might impact each gender's bodily experience. For women, some religious teachings have been shown to have a protective effect in relation to their body image and eating behavior (Boyatzis et al., 2007; Boyatzis et al., 2006; Zhang, 2012). In the same way, the attitude of sanctification might serve as a protective factor for women regarding the amount of somatization they experience and report. For men, religious teachings may serve at times to reinforce a suppression of bodily urges, particularly those teachings prohibiting certain types of sexual behaviors (Jacobson, 2011). In an attempt to inhibit their sexual desires and drives, Christian men might work harder to suppress their

bodily urges and feelings, emotions, and desires, especially in the area of sexuality.

# **Fourth Hypothesis**

The fourth hypothesis explored the relationships between age, gender, and sexuality awareness. Younger men reported higher levels of sexual consciousness than younger women. Men reported similar levels of sexual consciousness regardless of age, whereas older women reported slightly higher levels of sexual awareness than younger women. Interestingly, older men and women both reported similar levels of sexual consciousness, suggesting that age plays a significant role in women's developing sexual awareness. These results also suggest that women become more aware of their sexuality as they age, perhaps in part as they become sexually active (Jacobson, 2011). Previous research has tended to focus on gender differences related to engaging in sexual behaviors and attitudes about sexual behaviors, while neglecting the experience of sexual awareness (Petersen & Hyde, 2010). One study found that as couples aged, their frequency of sexual contact decreased while their physical and emotional satisfaction with sexual intercourse increased, suggesting that the relationships between age, gender and sexuality are complex and need to be

explored in more detail (Lodge & Umberson, 2012). Future longitudinal research could explore how men and women experience their sexuality over the life-span, particularly looking at how being sexually active and aging affects one's sexual awareness. Other research could explore whether these findings are similar among people from a variety of ethnic and religious backgrounds.

### Fifth Hypothesis

The fifth hypothesis explored the relationship between age, sanctification, and sexuality awareness. For all participants regardless of age, those who reported higher levels of theistic sanctification also reported higher levels of sexual awareness (in the second hypothesis, sanctification and sexuality awareness were positively correlated but not significant according to the Bonferroni cutoff value). Additionally, older participants reported higher levels of sexual awareness than younger participants. In particular, older participants who reported higher levels of sexuality awareness than younger participants who reported higher levels of theistic sanctification.

In the post-hoc analyses, the most striking findings were among unmarried, sexually active participants who reported varying levels of sexuality

awareness depending on the amount that they sanctified their bodies. The specific way in which these participants sanctified their bodies appears to have mattered significantly in whether they were more or less sexually aware. Unmarried, sexually active participants who reported higher levels of nontheistic sanctified views of the body also reported increased sexual awareness. This is consistent with previous research (Murray-Swank et al., 2005) which found that unmarried, college-aged participants who sanctified their bodies were more likely to be sexually active and to be more satisfied with their sexual relationships than participants who did not sanctify their bodies. Murray-Swank et al. (2005) suggested that sanctification is a distinct construct from approval of premarital sex and instead stated that sanctification may be linked to positive attitudes about sexuality in the context of loving relationships, whether married or not. With this context in mind, it may be that the unmarried, sexually active participants in the present study were simultaneously able to hold non-theistic sanctified views of their bodies and at the same time engage in sexual behaviors.

In contrast to non-theistic sanctification, unmarried, sexually active participants who reported higher levels of theistic sanctification also reported lower sexual awareness. It may be that the nature of items on the two measures of theistic sanctification, both of which explicitly describe one's body in relation

to God, activated participants' religious beliefs regarding their sexual activity.

As noted earlier, many empirical studies have supported the idea that religiousness inhibits the expression of sexuality outside of marriage (Baier & Wampler, 2008; Daniluk, 1993; Davidson et al., 1995; Paul et al., 2000; Regenerus, 2007; Schultz et al., 1977). It may be that unmarried, sexually active participants were reminded of their religious views by rating the theistic sanctification items. It may also be that these participants experience tension between their sexual activity outside of marriage and their religious beliefs, which could inhibit their awareness of their sexuality despite being sexually active. This study extends the work of previous studies in that it included older adults and suggests that across a broad range of ages, sexual activity plays an important role in understanding how sanctification impacts one's sexuality awareness.

As demonstrated in additional post hoc analyses, unmarried participants who were not sexually active reported higher levels of intrinsic religiosity than unmarried participants who were sexually active. This is consistent with previous research which has found negative links between activities such as praying and attending church and frequency of sexual activity outside of marriage (Murray-Swank et al., 2005) as well as research demonstrating that religion inhibits expression of sexuality outside of marriage (Baier & Wampler,

2008; Daniluk, 1993; Davidson et al., 1995; Paul et al., 2000; Regenerus, 2007; Schultz et al., 1977). It may be that unmarried, religious people who are particularly intrinsically motivated are more likely to adhere strongly to the teachings of their particular religious tradition and are therefore less likely to engage in sexual activity outside of marriage.

Another possible explanation for these findings is the health risks associated with sexual activity outside of a marriage relationship. Masters and Knetsel (2011) found links between intrinsic religiosity and overall beneficial perceptions and habits regarding one's health. In their study, participants who were more intrinsically oriented were also less likely to drink alcohol and ranked their health significantly better than participants who were extrinsically oriented. It may be that participants with a more intrinsic orientation are more unwilling to engage in risky behaviors such as being sexually active outside of marriage.

The findings from this study support the assertions of Murray-Swank et al. (2005), who suggested that a more nuanced, specific exploration of religious attitudes regarding sexuality could contribute to further understanding people's sexual functioning. In particular, it would be beneficial to explore how theistic and nontheistic sanctification are interrelated with sexuality awareness among

men and women. More longitudinal research is also needed to explore the complex relationships between age, religious attitudes, and sexuality awareness.

## **Sixth Hypothesis**

The sixth hypothesis explored the relationships between body shame, radical dualism, sanctification, and the attitude of body objectification. Body shame mediated the relationship between radical dualism and body objectification, indicating that holding radically dualistic views about the body affects one's body shame and consequently one's body shame affects body objectification. This finding is interesting in light of previous research on body objectification and body shame, which suggests that body objectification is linked to increased negative appraisals of one's body (Calogero, 2011; Calogero & Pina, 2011; Frank, 2003; McKinley & Hyde, 1996; Noll & Fredrickson, 1998; Thompson et al., 2003). Thompson et al. (2003) suggested that body objectification and body shame are linked in a cycle where one becomes increasingly sensitive to other's evaluations of one's body and thus experiences increasing amounts of body shame. Similarly, the findings from the present study suggest that holding a radically dualistic view of the body in which one sees the body as an outside object and not part of oneself affects the sense of shame that one feels about one's body. This sense of shame about one's body thus directly impacts how one objectifies one's body.

These results suggest a pathway for possible future interventions which could address the link between dualism and shame in order to alleviate objectification. Following the example of Boyatzis et al. (2007), future studies might conduct interventions which target both participants' radically dualistic views about their bodies and their feelings of shame about their bodies.

Surprisingly, neither theistic nor non-theistic sanctification were significantly correlated with body objectification in the present study. This finding contrasts with previous research (Jacobson et al., 2013) which found that sanctification and body objectification were negatively correlated with each other. One possible explanation for these contradictory findings is the role that age and gender play in how one views his or her body. As found in the post hoc analyses of the present study, for women, body objectification decreases as they age. Previous research has demonstrated the particular vulnerabilities to body objectification that college-aged women face (Boyatzis et al., 2007; Calogero & Pina, 2011; Davis-Quirarte, 2009; Thompson et al., 2003). Jacobson et al. (2013) surveyed college students, which might account for the significant, negative relationship that was found between sanctification and body objectification. In

contrast, the present study looked at a broader range of adults, half of whom were over 30 years old. Older women in this study reported lower levels of body objectification, which may partially explain why it was not significantly related to either theistic or non-theistic sanctification. Interestingly, for men, the correlation between age and body objectification was also negative, though not significant according to the Bonferroni cutoff.

### **Seventh Hypothesis**

The seventh hypothesis demonstrated that participants who engaged in club-level athletics reported higher levels of theistic sanctification than participants who were not involved in club-level athletics. It is possible that being involved in athletics encourages people to think more highly about their bodies and to value the ways in which their bodies function. Athletics can empower people to feel more connected to and engaged with their bodies (George, 2005; McDermott, 2000), which may encourage people who are religious to think more deeply about the relationships between their faith and their body. More research is needed to explore how these variables interface with each other. Future longitudinal or qualitative research could examine how involvement in

athletics over time, as well as one's religious views, impact one's connection to and experience of one's body.

## **Eighth Hypothesis**

The eighth hypothesis demonstrated that people who engaged in spiritual disciplines (prayer, meditation, fasting, or study of the Bible) reported higher levels of theistic and non-theistic sanctification than those who did not. Previous research has demonstrated that many people, particularly women, engage in spiritual disciplines such as prayer, meditation, and reading religious works to cope with body image issues (Jacobs-Pilipski et al., 2005; Kim, 2006). Spiritual disciplines appear to serve as a protective buffer against negative body image in adults, perhaps both by increasing one's awareness of religious teachings about one's body and by enhancing a connection to one's body. Additionally, as demonstrated in previous research, sanctification has been linked to positive outcome variables such as body satisfaction and health-protective behaviors, as well as lower levels of objectification and depersonalization (Jacobson et al., 2013; Mahoney et al., 2005). This study is the first to demonstrate a positive relationship between sanctification of one's body and engaging in spiritual disciplines.

One study by Greenwood and Delgado (2011) suggested that physical exercise can be considered a form of spiritual discipline in which a person is mindful of and honors one's body, a response which echoes the concept of sanctification. Future qualitative research exploring the ways in which spiritual disciplines interact with sanctification to buffer or mitigate negative body issues would be a valuable contribution in further understanding the role that religion and spirituality play in embodiment. Future intervention studies might build on the suggestions of previous research which suggested that individual and group opportunities for spiritual reflection, be built into the lives of college students (Zhang, 2012). Likewise, longitudinal research would be helpful in examining how engaging in spiritual disciplines over time influences one's religious views about the body.

## Ninth Hypothesis

Contrary to expectations, being involved in athletics, dance, running, or sports of any kind was not linked to higher internal body awareness or lower depersonalization and somatization. It may be that other factors besides being involved in physical activities contribute to awareness of internal sensations.

Depersonalization and somatization may occur independently of whether or not

a person is physically active; excelling in use of the body may be a separate construct from phenomenology. Wainwright and Turner (2004) and Wainwright et al. (2005) explored the experience of professional ballet dancers and found that when injured, ballerinas experienced depersonalization and feeling cut off from their bodies. This supports the idea that excelling physically with one's body may occur independently of experiencing depersonalization from one's body. Further qualitative research would be valuable in exploring these constructs, particularly among other groups of physically active participants besides ballet dancers. Longitudinal research would also be beneficial in exploring how these constructs interface with one another over time.

### **Tenth Hypothesis**

As predicted, intrinsic religiosity was positively correlated with body satisfaction. Previous research has also demonstrated links between intrinsic religiosity and body attitudes such as body satisfaction (Homan & Boyatzis, 2009; Smith et al., 2004). The present study builds on the work of Homan and Boyatzis (2009) by including older adults and looking at both men and women. Boyatzis et al. (2007) found that women who read explicitly theistic affirmations about their bodies reported higher body esteem. It may be that these theistic

affirmations are more closely related to an intrinsic religious orientation, suggesting that this may serve a protective role against negative body image for women. Future qualitative research could explore these relationships by examining more specifically how an intrinsic orientation is related to body satisfaction. Longitudinal research could also explore these links and how they change or develop over time.

The present study also found that participants who had an intrinsic orientation reported fewer difficulties in emotion awareness than participants who did not report being intrinsically oriented. These results support that of two previous studies which explored links between intrinsic religiosity and emotional intelligence, a concept that incorporates that of emotional awareness (Liu, 2010; Paek, 2006). In both cases, intrinsic religiosity was positively correlated with emotional intelligence. It may be that having a more intrinsic, religious orientation encourages a focus on awareness of oneself which positively impacts emotional awareness. Further qualitative research would be valuable in exploring how one's religious orientation is related to one's emotional awareness.

Extrinsic religiosity was positively correlated with body objectification.

Allport and Ross (1967) describe extrinsic religiosity as using religion for

utilitarian ends, such as providing security or solace, distraction or sociability, or personal status and self-justification. McKinley and Hyde (1996) describe body objectification as internalizing cultural standards about one's body and seeing one's body as an external observer. They specify that for many women, body objectification becomes associated with self-love, health, and achievement. Based on these two definitions, extrinsic orientation and body objectification appear to share a commonality of using something to achieve other ends; a person who is extrinsically oriented is more likely to use religion for personal ends and a person who objectifies their body uses their body for certain ends such as approval from others. This may help to explain the significant correlation between extrinsic religiosity and body objectification.

This is the first study to examine links between extrinsic religiosity and body objectification. Future qualitative research could explore the ways in which individuals who are extrinsically orientated objectify their bodies. Longitudinal research could also examine how religious orientation and body objectification might change and influence one another over time.

## **Eleventh Hypothesis**

The eleventh hypothesis looked at relationships between intrinsic/ extrinsic religiosity and the religious attitudes of sanctification and radical dualism. Intrinsic religiosity was found to be positively related to both nontheistic and theistic sanctification. Intrinsic religiosity is defined by Allport and Ross (1967) as living out one's religion in all areas of life and of bringing all of one's needs into harmony with one's religious creeds. This is consistent with the concept of sanctification, in which something is imbued with divine characteristics and considered worthy of respect and value (Pargament & Mahoney, 2005). In contrast to what was expected, extrinsic religiosity was not significantly related to radical dualism. This study is the first to examine links between sanctification and intrinsic religiosity. Future qualitative research could explore how religious orientation and these religiously-influenced views are related among individuals. Likewise, longitudinal research could explore how the relationship between intrinsic religiosity and sanctification develops over time.

### Twelfth Hypothesis

The twelfth hypothesis examined whether or not the religious attitudes of sanctification and radical dualism predicted the outcome measures above and beyond religious commitment and intrinsic/extrinsic religiosity. For body attitudes, radical dualism significantly predicted both body satisfaction and body shame over and above more general religious constructs. For body experiences, radical dualism significantly predicted lack of body awareness above and beyond religious commitment and religious orientation. While previous literature has examined how sanctification predicts body attitudes (Jacobson et al., 2013; Mahoney et al., 2005), no research to date has examined how radical dualism is related to body attitudes and experiences. These findings further support the results of the first hypothesis in demonstrating how the view of radical dualism is related to both negative body attitudes and body experiences. They also suggest a need for future interventions aimed at addressing people's views of their bodies, particularly their negative, religious views.

Surprisingly, none of the sanctification measures predicted any of the outcome measures above and beyond the other more general religious constructs. This is contrary to previous research (Jacobson et al., 2013; Mahoney et al., 2005), which found that sanctification predicted body satisfaction over and

above the more general construct of religious commitment. It may be that in the present study, including intrinsic and extrinsic religiosity along with religious commitment affected the significance of the results. Sanctification and intrinsic religiosity appear to be closely related, as evidenced by the high correlations between these constructs in the analyses from the eleventh hypothesis of the current study.

Future research could explore how one's religious attitudes and religious orientation develop and interact. In particular, longitudinal research that tracks these relationships over time would be beneficial. Cross-sectional research comparing people from different ages and religious traditions would also be valuable in examining how these constructs are related.

## Limitations of the Study

There are several limitations to this study. First, the sample was composed of predominantly European American participants who were fairly highly educated and heterosexual. In order to assure that these findings are consistent across race, ethnicity, and other diversity domains, this study would need to be replicated using other samples. Similarly, these participants were recruited using a snowball sample, which limits the generalizability of the data.

A second limitation of this study is that the correlational nature of many of the hypotheses does not allow causal inferences to be drawn. It is possible that in addition to religious views of the body influencing a person's attitudes and experience of the body, the reverse may also be true. It may be that people who feel more connected to and aware of their bodies will consequently hold a more sanctified view of their bodies or that people who objectify their bodies and experience disconnection from them will also hold more radically dualistic views about their bodies.

#### **Future Research**

Consistent with the limitations of the present study, future research could explore the relationship between religious attitudes and experiences of the body among a wider variety of samples. In particular, more studies are needed that look at these relationships among people who represent minority groups in the areas of ethnicity, race, and sexual orientation. The present study builds on the existing research by including men, but men continue to be an understudied group in the area of body attitudes and experience, so more research with men would also be valuable.

Additionally, as suggested by Jacobson et al. (2013), longitudinal research looking at the effects of dualism and sanctification on one's experience of the body over time would be helpful in further understanding the way these constructs are related. Longitudinal research could also explore how one's religious attitudes toward the body and experiences of the body change over the lifespan.

In conclusion, this study contributes to the existing literature regarding religious beliefs and body attitudes and expands on it by adding in the outcome measures of body experiences. Additionally, this study looked at a wide range of ages and included men as well as women, giving a fuller perspective on how people in general relate to their bodies. Both radical dualism and sanctification appear to have important implications for the ways in which people think about and interact with their bodies. Following in the footsteps of previous research, this study continues to further elucidate the links that exist between these constructs.

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## APPENDIX A

**INSTRUMENTS** 

### **INSTRUMENTS**

## **Dualistic Attitudes toward the Body Scale**

Please indicate the degree to which you agree with each statement, ranging from 1 (*strongly disagree*) to 7 (*strongly agree*):

(	0.3	0	- / (	0	9					
Stro	ngly					Strongly				
disag	gree					agree				
1	2	3	4	5	6	7				
1. M	ly body	is just	t somet	hing I	live in l	here on earth.				
1	2	3	4	5	6	7				
2. M	2. My body is basically sinful.									
1	2	3	4	5	6	7				
3. M	ly soul	is mor	e impo	rtant to	God t	han my body.				
1	2	3	4	5	6	7				
4. I	can har	dly wa	ait to es	cape n	ny body	when I die.				
1	2	3	4	5	6	7				
5. M	ly body	frequ	ently ca	auses n	ne to si	n.				
1	2	3	4	5	6	7				
6. I	do not s	see my	body a	as imp	ortant i	n the process of spiritual formation.				
1	2	3	4	5	6	7				
7. M	ly body	is an i	importa	ant pai	rt of me	. (R)				
1	2	3	4	5	6	7				
8. G	od did	not int	tend for	r us to	be in o	ur bodies forever.				
1	2	3	4	5	6	7				
9. Often, I cannot control my body's urges.										
1	2	3	4	5	6	7				
10. It seems that sins of the body, such as sexual sin, are worse than other kinds										
of si	ns.									
1	2	3	4	5	6	7				
11. V	When I'	m mal	king a c	lecisio	n, I do 1	not take into account my emotions, only				
	rationa									
1	2	3	4	5	6	7				
12. I'm engaged in a life-long struggle to subdue the lusts of the body.										
1	2	3	4	5	6	7				

## Sacred Qualities of the Body Scale

Please indicate the degree to which you feel each word applies to your body, ranging from 1 (*does not describe at all*) to 7 (*very closely describes*):

Does not Very closely								
describe a	t all			desc	ribes			
1 2	3	4	5	6	7			
Blessed	Blessed							
1 2	3	4	5	6	7			
Holy								
1 2	3	4	5	6	7			
Sacred								
1 2	3	4	5	6	7			
Spiritual								
1 2	3	4	5	6	7			
Miraculo	us							
1 2	3	4	5	6	7			
Divine								
1 2	3	4	5	6	7			
Hallowed								
1 2	3	4	5	6	7			
Spirit-filled								
1 2	3	4	5	6	7			
Heavenly								
1 2	3	4	5	6	7			
Religious								
1 2	3	4	5	6	7			

Permission to use this scale was obtained from the author via email.

## Manifestation of God in the Body Scale

Please indicate the degree to which you agree with each statement, ranging from 1 (*strongly disagree*) to 7 (*strongly agree*):

Stroi						Strongly	
disag	_	0	4	_		agree	
1	2	3	4	5	6	7	
1. M	y body	y is a te	mple o	f God.			
1	2	3	4	5	6	7	
2. M	y body	y is crea	ated in	God's	image.		
1	2	3	4	5	6	7	
3. M	y body	y is a gi	ft from	God.			
1	2	3	4	5	6	7	
4. G	od is p	resent i	in my t	ody.			
1	2	3	4	5	6	7	
5. G	od use	s my bo	ody to	do God	l's will.		
1	2	3	4	5	6	7	
6. M	y body	y is uni	ted wit	h God.			
1	2	3	4	5	6	7	
7. M	y body	y is bon	ided to	the eve	erlastin	g Spirit of God.	
1	2	3	4	5	6	7	
8. A spark of the divine resides in my body.							
1	2	3	4	5	6	7	
9. God lives through my body.							
1	2	3	4	5	6	7	
10. God is glorified through my body.							
1	2	3	4	5	6	7	
11. My body is an instrument of God.							
1	2	3	4	5	6	7	
12. The power of God moves through my body.							
1	2	3	4	5	6	7	

Permission to use this scale was obtained from the author via email.

# **Christian Teachings on the Body Scale**

Please indicate the degree to which you agree with each statement, ranging from 1 (*strongly disagree*) to 7 (*strongly agree*):

Stro	ngly					Strongly
disa	gree					agree
1	2	3	4	5	6	7
1. M	Iy body	is a liv	ing sac	rifice to	God.	
1	2	3	4	5	6	7
2. N	Iy body	is mira	aculous			
1	2	3	4	5	6	7
3. I s	serve G	od thro	ough m	y body		
1	2	3	4	5	6	7
4. N	Iy body	is a ter	mple of	God.		
1	2	3	4	5	6	7
5. It	does n	ot matt	er what	I do w	ith my	body. (R)
1	2	3	4	5	6	7
6. N	ly body	is a gif	ft from	God.		
1	2	3	4	5	6	7
7. M	ly body	is Spir	it-filled			
1	2	3	4	5	6	7
8. I	can do	whatev	er I wa	nt with	my bo	dy. (R)
1	2	3	4	5	6	7
9. N	Iy body	is bles	sed.			
1	2	3	4	5	6	7
10. I	honor	God th	rough 1	ny bod	ly.	
1	2	3	4	5	6	7
11. 1	My bod	y is a te	emple o	f the H	loly Spi	rit.
1	2	3	4	5	6	7
12. I	glorify	God tl	nrough	my bo	dy.	
1	2	3	4	5	6	7
13. I	My bod	y is hol	ly.			
1	2	3	4	5	6	7
14. 1	My bod	y is fea	rfully a	nd wo	nderful	ly made.
1	2	3	$\overset{\circ}{4}$	5	6	7
(R)=	Rever	se-scor	ed			

## **Religious Commitment Inventory**

Please indicate the degree to which each statement is true of you, ranging from 1 (not at all true of me) to 5 (totally true of me):

Not at	ţ			Totally	
all tru	e			true of	
of me				те	
1	2	3	4	5	
1. I of	ten read	l books a	ınd mag	azines about	my faith.
1	2	3	4	5	
2. I m	ake fina	ncial cor	ntributio	ons to my relig	gious organization.
1	2	3	4	5	
3. I sp	end tim	e trying	to grow	in understan	ding of my faith.
1	2	3	4	5	
4. Rel	igion is	especiall	ly impoi	tant to me be	cause it answers many questions
about	the mea	aning of	life.		
1	2	3	4	5	
5. My	religiou	as beliefs	lie behi	ind my whole	approach to life.
1	2	3	4	5	
6. I er	ijoy spei	nding tir	ne with	others of my	religious affiliation.
1	2	3	4	5	
7. Rel	igious b	eliefs inf	luence a	all my dealing	gs in life.
1	2	3	4	5	
8. It is	s import	ant to m	e to spe	nd periods of	time in private religious thought and
reflec	tion.				
1	2	3	4	5	
9. I er	ijoy wor	king in t	he activ	ities of my re	ligious organization.
1	2	3	4	5	
10. I k	keep wel	ll inform	ed abou	t my religiou	s group and have some influence in its
decisi	_			- 0	-
1	2	3	4	5	

Permission to use this scale for research purposes was granted from the author via email correspondence on 6/10/13.

#### Intrinsic/Extrinsic Measurement: I/E-Revised

Please indicate the degree to which each statement is true of you, ranging from 1 (*strongly disagree*) to 5 (*strongly agree*):

Stı	ronglį	1	,	. 00	Strongly	
dis	agree				agree	
	1	2	3	4	5	
1.	I enj	oy readii	ng aboi	ıt my re	eligion. (I)	
1	2	3	4	5		
2.	I go	to churcl	h becau	ıse it hel	lps me to make friends. (Es)	
1	2	3	4	5		
3.	It do	oesn't mu	ich mat	tter wha	at I believe so long as I am good. (I-R)	
1	2	3	4	5		
4.	It is	importar	nt to me	e to sper	nd time in private thought and prayer. (I)	
1	2	3	4	5		
5.	I ha	ve often l	nad a s	trong se	ense of God's presence. (I)	
1	2	3	4	5		
6.	I pra	ay mainly	y to gai	n relief a	and protection. (Ep)	
1	2	3	4	5		
7.	I try	hard to	live all	my life	according to my religious beliefs. (I)	
1	2	3	4	5		
8.	Wha	at religio	n offers	me mos	est is comfort in times of trouble and sorrow. (Ep)	
1	2	3	4	5		
9.	Pray	ver is for	peace a	nd hap	piness. (Ep)	
1	2	3	4	5		
10.	Alth	ough I a	m relig	ious, I d	don't let it affect my daily life. (I-R)	
1	2	3	4	5		
11.	I go	to churcl	h mostl	ly to spe	end time with my friends. (Es)	
1	2	3	4	5		
12.	My	whole ap	proach	to life i	is based on my religion. (I)	
1	2	3	4	5		
13.	I go	to churcl	h main	ly becau	use I enjoy seeing people I know there. (Es)	
1	2	3	4	5		
14.	Alth	ough I b	elieve i	n my re	eligion, many other things are more important in li	ife
(I-		Ü		-		
1	2	3	4	5		

I-Intrinsic; Es-Extrinsic (social); Ep-Extrinsic (personal); R-Reverse-scored

# Body Areas Satisfaction Subscale of the Multi-Dimensional Body-Self Relational Questionnaire

Use this 1 to 5 scale to indicate how dissatisfied or satisfied you are with each of the following areas or aspects of your body:

Very Dissat	Mostly isfied Dissatisfied	Neither Satisfied Nor Dissatisfied	Mostly Satisfied	Very Satisfied				
	Face (facial features,	complexion)						
	Hair (color, thickness	, texture)						
	Lower torso (buttock	s, hips, thighs, leg	gs)					
	Mid-torso (waist, stomach)							
	Upper torso (chest or	breasts, shoulder	rs, arms)					
	Muscle tone							
	Weight							
	Height							
	Overall appearance							

The author purchased this scale online and was subsequently granted permission to use the scale for research purposes.

#### **Body-Esteem Scale for Adolescents and Adults**

Indicate how often you agree with the following statements ranging from "never" (0) to "always" (4).

Never	Seldom	Sometimes	Often	Always							
0	1	1 2		4							
1.	I like what I look like in pictures.										
0	1	2	3	4							
2.	Other people of	consider me go	od looking.								
0	1	2	3	4							
3.	I'm proud of n	ny body.									
0	1	2	3	4							
4.	I am preoccup	ied with trying	to change	my body weight. (	$(\mathbf{R})$						
0	1	2	3	4							
5.	I think my app	earance would	l help me g	et a job.							
0	1	2	3	4							
6.	I like what I see when I look in the mirror.										
0	1 2 3 4										
7.	There are lots of things I'd change about my looks if I could. (R)										
0	1	2	3	4							
8.	I am satisfied	with my weigh	t.								
0	1	2	3	4							
9.	I wish I looked better. (R)										
0	1	2	3	4							
10.	I really like wh	nat I weigh.									
0	1	2	3	4							
11.	I wish I looked	l like someone	else. (R)								
0	1	2	3	4							
12.	People my ow	n age like my lo	ooks.								
0	1	2	3	4							
13.	My looks upse	et me. (R)									
0	1	2	3	4							
14.	I'm as nice loo	king as most pe	eople.								

0	1	2	3	4			
15.	I'm pretty happy about the way I look.						
0	1	2	3	4			
16.	I feel I weigh the	right an	nount for my height.				
0	1	2	3	4			
17.	I feel ashamed o	f how I lo	ook. (R)				
0	1	2	3	4			
18.	Weighing mysel	f depress	ses me. (R)				
0	1	2	3	4			
19.	My weight make	es me un	happy. (R)				
0	1	2	3	4			
20.	My looks help m	ne to get o	dates.				
0	1	2	3	4			
21.	I worry about th	e way I l	ook. (R)				
0	1	2	3	4			
22.	I think I have a g	good bod	y.				
0	1	2	3	4			
23.	I'm looking as ni	ice as I'd	like to.				
0	1	2	3	4			
(R) = 1	reverse-scored						

Body esteem-Appearance: Items 1, 6, 7, 9, 11, 13, 15, 17, 21, 23

Body esteem- Attribution: Items 2, 5, 12, 14, 20

Body esteem- Weight: Items 3, 4, 8, 10, 16, 18, 19, 22

Permission to use this scale for research purposes was obtained from the author via email correspondence on 6/10/13.

#### **Body Appreciation Scale**

Indicate how often you agree with the following statements ranging from "never" (1) to "always" (5).

Never	Seldom	Sometimes	Often	Always	
1	2	3	4	5	
1. I resp	ect my body				
1	2	3	4	5	
2. I feel	good about 1	ny body.			
1	2	3	4	5	
3. On th	e whole, I ar	n satisfied with	my body.		
1	2	3	4	5	
4. Despi	te its flaws, l	accept my bod	y for what i	t is.	
1	2	3	4	5	
5. I feel	that my body	y has at least so	ne good qu	alities.	
1	2	3	4	5	
6. I take	a positive at	titude toward n	ny body.		
1	2	3	4	5	
7. I am a	attentive to n	ny body's needs	•		
1	2	3	4	5	
8. My se	elf-worth is i	ndependent of n	ny body sh	ape or weight.	
1	2	3	4	5	
9. I do n	ot focus a lo	t of energy being	g concerned	d with my body sha	pe.
1	2	3	4	5	
10. My f	eelings towa	ard my body are	positive, fo	or the most part.	
1	2	3	4	5	
11. I eng	gage in healtl	ny behaviors to	take care of	my body.	
1	2	3	4	5	
12. <b>[If y</b>	ou are a wor	<b>nan]</b> I do not all	ow unreali	stically thin images	of women
presente	ed in the med	dia to affect my	attitudes to	ward my body.	
1	2	3	4	5	
[If you	are a man] I	do not allow ur	realisticall	y muscular images	of men
presente	ed in the med	dia to affect my	attitudes to	ward my body.	
1	2	3	4	5	
13. Desp	oite its imper	fections, I still li	ke my bod	y.	
1	2	3	4	5	

Permission to use this scale for research purposes was obtained via email correspondence with the author on 6/10/13.

#### Objectified Body Consciousness Scale

Please indicate the degree to which you agree with each statement, ranging from 1 (*strongly disagree*) to 7 (*strongly agree*):

Stron						Strongly	Not
disagı	ree					agree	applicable
1	2	3	4	5	6	7	N/A
1. I ra	arely thi	nk abo	ut how	I look	. (R)		
1	2	3	4	5	6	7	N/A
2. I th	nink it is	more	import	ant tha	t my cl	othes are com	fortable than whether they
	good or		_		,		, and the second se
1	2	3	4	5	6	7	N/A
3. I th	nink mo	re abo	ut how	my bo	dy feels	s than how my	y body looks. (R)
1	2	3	4	5	6	7	N/A
4. I ra	arely co	mpare	how I l	ook wi	th how	other people	look. (R)
1	2	3	4	5	6	7	N/A
5. Du	ring the	e day, l	think a	about h	ow I lo	ook many time	es.
1	2	3	4	5	6	7	N/A
6. I of	ften wo	rry abo	out whe	ther th	e cloth	es I am wearii	ng make me look good.
1	2	3	4			7	N/A
7. I ra	arely wo	orry ab	out hov	w I lool	k to oth	er people. (R)	
1	2	3	4	5	6	7	N/A
8. I aı	m more	concei	ned wi	th wha	it my b	ody can do th	an how it looks. (R)
1	2	3	4	5	6	7	N/A
9. Wł	nen I ca	n't con	trol my	weigh	t, I feel	like somethir	ng must be wrong with me.
1	2	3	4	5	6	7	N/A
10. I f	feel ash	amed c	of myse	lf wher	n I have	en't made the	effort to look my best.
1	2	3	4	5	6	7	N/A
11. I f	feel like	I must	be a ba	ad pers	on who	en I don't look	c as good as I could.
1	2	3	4	5	6	7	N/A
12. I v	would b	e asha	med fo	r peop	le to kn	ow what I rea	ally weigh.
1	2	3	4	5		7	N/A
13. I ı	never w	orry th	nat som	ething	is wro	ng with me w	hen I am not exercising as
	n as I sh	-		J			9
1	2	3	4	5	6	7	N/A

14	When I'	m not	evercis	ing en	ough I	anestio	n whether I am a good enougl	h
	rson.	111 1100	CACICIS	nig cii	ougii, i	questio	ii whether rain a good chough	. L
1	2	3	4	5	6	7	N/A	
							nk I'm an okay person. (R)	
10.	2	3			6		N/A	
							I feel ashamed.	
10.	2	3	4	5	6	7	N/A	
							the looks they are born with. (	R)
1	2	3	4	5	6	7	N/A	.=\)
	_						at kind of body in the first place	ce.
(R)	0	Puri	rvenig	iii oria	PC 15 110	wing th	at kind of body in the inst place	
1	2	3	4	5	6	7	N/A	
19.	I think a	a perso	on can l	ook pr	etty mi	ach how	they want to if they are willir	ng to
	rk at it.	1		1	J		, , , , , , , , , , , , , , , , , , ,	O
1	2	3	4	5	6	7	N/A	
20.	I really	don't	think I l	nave m	uch co	ntrol ov	ver how my body looks. (R)	
	2		4		6	7	N/A	
21.	I think a	a perso	on's we	ight is	mostly	determ	ined by the genes they are bor	n
	th. (R)	•		Ü	,		, o	
	` ,	3	4	5	6	7	N/A	
22.	It doesn	ı't mat	ter how	hard	I try to	change	my weight, it's probably alwa	ys
	ing to be				-	O		
1	2				6	7	N/A	
23.	I can we	eigh w	hat I'm	suppo	sed to	when I	try hard enough.	
1	2	3	4	5	6	7	N/A	
24.	The sha	pe you	are in	depen	ds mos	stly on y	our genes. (R)	
1	2	3	4	5	6	7	N/A	
(R)	= Revers	se-scoi	red					
Su	rveillanc	e subs	cale: Ite	ems 1-8	3			
Sh	ame sub	scale: l	Items 9-	-16				
Co	ntrol sub	scale:	Items 1	17-24				

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#### Body Image Guilt and Shame Scale (BIGSS)

Below are several situations that people are likely to encounter in day-to-day life, followed by several common reactions to these situations. As you read each scenario, try to imagine yourself in that situation. Then indicate how likely you would be to react in each of the ways described. Please rate <u>all</u> responses for <u>every item</u> because you may feel or react in more than one way to the same situation, or you may react in different ways at different times.

- 1. You and a friend decide to do some form of physical activity together each weekday, but after the first few days you make excuses not to go.
- (a) You would think: I'm totally undisciplined.

(b) You would think: There were too many other things that distracted my attention.

(c) You would think: I'll make up for it next week.

(d) You wouldn't think about it as terribly important.

- 2. Your partner expresses disappointment over your body.
- (a) You would attribute your partner's disapproval to wrong priorities.

(b) You would wonder "Why?", since you are happy with your physique.

	te your partner's disapproval to your failure to keep trim.
Not likely 13	Very likely
123	<del>4</del>
(d) You would feel di	minished in your image of yourself.
	Very likely
12	35
	negative comment about some aspect of your physique. badly that you wouldn't be able to focus on anything else
Not likely	Very likely
12	5
(b) You would think: eat.	I must commit myself to regular exercise and watch what I
•	Very likely 35
(c) You would think t was saying.	he person was insensitive and didn't realize what he or she
Not likely 13	
(d) You wouldn't be t reasons.	roubled since people say negative things for all kinds of
Not likely	Very likely
12	35
you.	n and everybody seems to have a better-looking body than
(a) You wouldn't care worth.	because your body is not an important aspect of your self-

Not likely 12	Very likely 35
(b) You would think: I sl	ould have stuck to my exercise program.
Not likely 13	ž ž
(c) You would feel so aw	ful that you want to hide.
Not likely 13	Very likely -45
(d) You would think: The regularly.	y don't lead busy lives, so they are able to exercise
Not likely 12	Very likely 35
5. <b>Your partner asks y</b> o (a) You would feel wort	•
<b>J</b>	Very likely 5
(b) You would decide to	do something about your weight.
Not likely	Very likely
13	-45
(c) You would tell your are.	partner that she or he should accept you for who you
Not likely 13	
(d) You would tell your	partner that she or he is not perfect either.
Not likely 13	Very likely 45

<ul><li>6. You sit down in a self-serve restaurant and notice that you have much more food on your plate than everyone else at your table.</li><li>(a) You would say to yourself that you are hungrier than they are.</li></ul>
Not likely Very likely 15
(b) You would decide not to eat all the food on your plate.
Not likely Very likely 15
(c) You would feel bad and think that everybody is looking at you and your food.
Not likely Very likely 15
(d) You wouldn't be worried and wouldn't give it a second thought.
Not likely Very likely 135
<ul><li>7. You are at the beach and everyone else looks so slim and toned compared to you.</li><li>(a) You would think: I need to get back to my healthy lifestyle plan.</li></ul>
Not likely Very likely 15
(b) You would think: There will always be people who look better than I.
Not likely Very likely 15
(c) You would feel totally inadequate and stay covered up.
Not likely Very likely 135

(d) You wouldn't care. How your body looks is not the most important thing in your life.
Not likely Very likely 15
<ul><li>8. You have just eaten a big lunch, but as you pass the corner store, you buy a chocolate bar and eat it.</li><li>(a) You would say to yourself: Tonight I will go for a long walk or run to make up for it.</li></ul>
Not likely Very likely
15
(b) You would say to yourself: I just felt like having something sweet.
Not likely Very likely 135
(c) You would feel disgusted by your lack of self-control.
Not likely Very likely 15
(d) You would say to yourself: Who cares?
Not likely Very likely 135
<ul><li>9. At a family reunion, a relative says to you "You look like you've put on some weight."</li><li>(a) You would feel embarrassed and belittled.</li></ul>
Not likely Very likely 135
(b) You would think: She or he didn't intend to be insensitive.
Not likely Very likely 135

(c) You would think: That person never liked me!
Not likely Very likely 15
(d) You would think that you deserved the comment and decide to lose some weight.
Not likely Very likely 135
10. While you are with a group of friends you all make fun of an absent friend's body.
(a) You would think: It was a joke; it's harmless.
Not likely Very likely 15
(b) You would feel immature and insensitive.
Not likely Very likely 15
(c) You would decide that you had to go along with it at the time.
Not likely Very likely 15
(d) You would promise yourself not to do it again.
Not likely Very likely 15
11. While looking at some models on a swimsuit calendar, your partner makes negative comparisons in relation to your body.
(a) You would regret that you put off exercising this week.
Not likely Very likely 135

(b) You would think your partner is too concerned about external beauty.
Not likely Very likely 15
(c) You wouldn't be bothered by the calendar images; they are just pictures.
Not likely Very likely 15
(d) You would feel inadequate because you know you don't compare favourably.
Not likely Very likely 15
12. You are trying on clothes in a store and the assistant says loudly, "You may need a larger size!"
(a) You would feel as though you want the ground to open up and swallow you.
Not likely Very likely 15
(b) You would think: I won't buy these clothes until I can fit into them.
Not likely Very likely 15
(c) You would regard the comment as unimportant.
Not likely Very likely 15
(d) You would think: The assistant is probably having a bad day.
Not likely Very likely 15

13. You are watching a television show with a friend and notice that all the actors have perfect bodies.
(a) You would say to your friend: They have money for a personal trainer!
Not likely Very likely 15
(b) You would tell your friend that you've decided to stop eating junk food from now on.
Not likely Very likely 15
(c) You would tell your friend how very depressed you feel after seeing all of those perfect bodies.
Not likely Very likely 15
(d) You would laugh with your friend about how unrealistic the show is.
Not likely Very likely 15
14. Halfway through a celebration dinner, you realize you feel very full and that you have eaten far too much.
(a) You would feel very bad that you have no self-control.
Not likely Very likely 15
(b) You would decide not to eat any of the desserts that are in front of you.
Not likely Very likely 15
(c) You would be philosophical and say to yourself that it is a celebration.
Not likely Very likely 15

(d)	) You	would	think:	What's	done	is	done
-----	-------	-------	--------	--------	------	----	------

Not likely Very likely 1-----5

### 15. You find that your clothes from last summer are very tight around your waist.

(a) You would think: Well, it's time to buy some new clothes anyway!

(b) You would feel undisciplined and overweight.

(c) You would go out and buy a 6-month membership to a gym.

(d) You would think: I've been very busy over the last year, with no time to exercise.

#### Scoring for the Body Image Guilt and Shame Scale

To form the **Body Image Guilt** Score, sum the responses to the following items: 1c, 2c, 3b, 4b, 5b, 6b, 7a, 8a, 9d, 10d\*, 11a, 12b, 13b, 14b, 15c

To form the **Body Image Shame** Score, sum the responses to the following items: 1a, 2d, 3a, 4c, 5a, 6c, 7c, 8c, 9a, 10b\*, 11d, 12a, 13c, 14a, 15b

\*Item 10 proved to be psychometrically unsound. Researchers may want to consider eliminating it from the total score.

#### Difficulties in Emotional Regulation Scale

Please indicate how often the following statements apply to you by writing the appropriate number from the scale below on the line beside each item.

1	2	3	4	5		
almost never	sometimes	about half	most of the time	almost always		
		of the time	•	_		
(0-10%)	(11-35%)	(36-65%)	(66-90%)	(91-100%)		
1) I ar	n clear about m	y feelings.				
•	ay attention to l	,				
	3) I experience my emotions as overwhelming and out of control.					
	ave no idea hov		- C			
			out of my feelings.			
	n attentive to m	_	, o			
•	now exactly how	•	).			
	are about what I					
	n confused abo					
10) When I'm upset, I acknowledge my emotions.						
11) When I'm upset, I become angry with myself for feeling that						
way.						
12) W	hen I'm upset,	I become eml	oarrassed for feelin	ng that way.		
13) W	13) When I'm upset, I have difficulty getting work done.					
14) When I'm upset, I become out of control.						
15) When I'm upset, I believe that I will remain that way for a lo				way for a long		
time.						
16) W	hen I'm upset,	I believe that	I will end up feeli	ng very		
depre	essed.					
17) W	hen I'm upset,	I believe that	my feelings are va	alid and		
impo	rtant.					
18) W	hen I'm upset,	I have difficu	lty focusing on otl	ner things.		
19) W	hen I'm upset,	I feel out of c	ontrol.			
20) W	hen I'm upset,	I can still get	things done.			
21) W	hen I'm upset,	I feel ashame	d at myself for fee	ling that way.		
22) W	hen I'm upset,	I know that I	can find a way to	eventually feel		
better						

 23) When I'm upset, I feel like I am weak.
 24) When I'm upset, I feel like I can remain in control of my
behaviors.
 25) When I'm upset, I feel guilty for feeling that way.
 26) When I'm upset, I have difficulty concentrating.
 27) When I'm upset, I have difficulty controlling my behaviors.
 28) When I'm upset, I believe there is nothing I can do to make myself feel
better.
 29) When I'm upset, I become irritated at myself for feeling that way.
 30) When I'm upset, I start to feel very bad about myself.
 31) When I'm upset, I believe that wallowing in it is all I can do.
 32) When I'm upset, I lose control over my behavior.
 33) When I'm upset, I have difficulty thinking about anything else.
 34) When I'm upset I take time to figure out what I'm really feeling.
 35) When I'm upset, it takes me a long time to feel better.
36) When I'm upset, my emotions feel overwhelming.

- 1. Nonacceptance of emotional responses: 11, 12, 21, 23, 25, 29
- 2. Difficulty engaging in goal-directed behavior: 13, 18, 20(R), 26, 33
- 3. Impulse control difficulties: 3, 14, 19, 24(R), 27, 32
- 4. Lack of emotional awareness: 2(R), 6(R), 8(R), 10(R), 17(R), 34(R)
- 5. Limited access to emotion regulation strategies: 15, 16, 22(R), 28, 30, 31, 35, 36
- 6. Lack of emotional clarity: 1(R), 4, 5, 7(R), 9
- (R) indicates reverse scored item

#### Cambridge Depersonalization Scale

This questionnaire describes strange and 'funny' experiences that normal people may have in their daily life. We are interested in their: (a) frequency, i.e. how often you have had these experiences *over the last six months* and (b) their approximate duration. For each question, please circle the answers that suit you best. If you are not sure, give your best guess.

1. Out of the blue, I feel strange, as if I were not real or as if I were cut off from the world.

Frequency	Duration
0 = never	In general, it lasts:
1 = rarely	$1 = few \ seconds$
2 = often	2 = few minutes
3 = very often	3 = few hours
4= all the time	$4 = about \ a \ day$
5 = more than a day	
6 = more than a week	

2. What I see looks 'flat' or 'lifeless', as if I were looking at a picture.

	,
Frequency	Duration
0 = never	In general, it lasts:
1 = rarely	$1 = few\ seconds$
2 = often	2 = few minutes
3 = very often	3 = few hours
4= all the time	$4 = about \ a \ day$
5 = more than a day	
6 = more than a week	

3. Parts of my body feel as if they didn't belong to me.

Frequency	Duration
0 = never	In general, it lasts:
1 = rarely	$1 = few\ seconds$
2 = often	2 = few minutes
3 = very often	3 = few hours
4= all the time	$4 = about \ a \ day$
5 = more than a day	
6 = more than a week	

4. I have found myself *not being frightened at all* in situations which normally I would find frightening or distressing.

lasts:

Frequency	Duration
0 = never	In general, it la
1 = rarely	$1 = few \ seconds$
2 = often	2 = few minutes
3 = very often	3 = few hours
4= all the time	$4 = about \ a \ day$

5 = more than a day 6 = more than a week

5. My favourite activities are no longer enjoyable.

# Frequency Duration 0 = never In general, it lasts: 1 = rarely 1 = few seconds 2 = often 2 = few minutes 3 = very often 3 = few hours 4= all the time 4 = about a day

5 = more than a day 6 = more than a week

6. Whilst doing something I have the feeling of being a "detached observer" of myself.

Frequency	Duration
0 = never	In general, it lasts:
1 = rarely	$1 = few \ seconds$
2 = often	2 = few minutes
3 = very often	3 = few hours
4= all the time	$4 = about \ a \ day$
5 = more than a day	

5 = more than a day 6 = more than a week

7. The flavor of meals no longer gives me a feeling of pleasure or distaste.

Frequency	Duration
0 = never	In general, it lasts:
1 = rarely	$1 = few \ seconds$
2 = often	2 = few minutes

3 = very often

3 = few hours

4= all the time

 $4 = about \ a \ day$ 

5 = more than a day

6 = more than a week

8. My body feels very light, as if it were floating on air.

#### Frequency

#### Duration

0 = never

In general, it lasts:

1 = rarely

1 = few seconds

2 = often

2 = few minutes

3 = very often

3 = few hours

4= all the time

 $4 = about \ a \ day$ 

5 = more than a day

6 = more than a week

9. When I weep or laugh, I do not seem *to feel* any emotions at all.

#### Frequency

#### Duration

0 = never

In general, it lasts:

1 = rarely

1 = few seconds

2 = often

2 = few minutes

3 = very often

3 = few hours

*4= all the time* 

 $4 = about \ a \ day$ 

5 = more than a day6 = more than a week

10. I have the feeling of *not having any thoughts at all*, so that when I speak it feels as if my words were being uttered by an 'automaton'.

#### Frequency

#### Duration

0 = never

In general, it lasts:

1 = rarely

1 = few seconds

2 = often

 $2 = few\ minutes$ 

3 = very often

3 = few hours

4= all the time

4 = about a day

5 = more than a day

6 = more than a week

11. Familiar voices (including my own) sound remote and unreal.

#### Frequency

Duration

0 = never

In general, it lasts:

1 = rarely

1 = few seconds

2 = often3 = very often 2 = few minutes

4= all the time

3 = few hours

5 = more than a day

 $4 = about \ a \ day$ 

5 = more than a week

12. I have the feeling that my hands or my feet have become larger or smaller.

#### Frequency

#### Duration

0 = never

In general, it lasts:

1 = rarely

1 = few seconds

2 = often

2 = few minutes

3 = very often

3 = few hours

4= all the time

 $4 = about \ a \ day$ 

5 = more than a day 6 = more than a week

13. My surroundings feel detached or unreal, as if there was a veil between me and the outside world.

#### Frequency

#### Duration

0 = never

In general, it lasts:

1 = 0

1 = few seconds

2 = often

2 = few minutes

3 = very often

3 = few hours

4= all the time

 $4 = about \ a \ day$ 

5 = more than a day 6 = more than a week

14. It seems as if things that I have recently done had taken place a long time ago. For example anything which I have done this morning feels as if it were done weeks ago.

#### Frequency

Duration

0 = never

In general, it lasts:

1 = rarely

1 = few seconds

2 = often 2 = few minutes 3 = very often 3 = few hours 4 = all the time 4 = about a day

5 = more than a day 6 = more than a week

15. Whilst fully awake I have "visions" in which I can *see* myself outside, as if I were looking at my image in a mirror.

## Frequency Duration 0 = never In general, it lasts:

1 = rarely1 = few seconds2 = often2 = few minutes3 = very often3 = few hours4 = all the time4 = about a day

5 = more than a day 6 = more than a week

16. I feel detached from memories of things that have happened to me - as if I had not been involved in them.

# FrequencyDuration0 = neverIn general, it lasts:1 = rarely1 = few seconds2 = often2 = few minutes3 = very often3 = few hours4 = all the time4 = about a day

5 = more than a day 6 = more than a week

17. When in a new situation, it feels as if I have been through it before.

## Frequency Duration 0 = never In general, it lasts:

1 = rarely1 = few seconds2 = often2 = few minutes3 = very often3 = few hours4 = all the time4 = about a day

5 = more than a day 6 = more than a week 18. Out of the blue, I find myself not feeling any affection towards my family and close friends.

Frequency	Duration
0 = never	In general, it lasts:
1 = rarely	$1 = few\ seconds$
2 = often	2 = few minutes
3 = very often	3 = few hours
4= all the time	$4 = about \ a \ day$
5 = more than a day	

19. Objects around me seem to look smaller or further away.

6 = more than a week

6 = more than a week

6 = more than a week

17. Objects around the seem to look sind	inci of further away
Frequency	Duration
0 = never	In general, it lasts:
1 = rarely	$1 = few \ seconds$
2 = often	2 = few minutes
3 = very often	3 = few hours
4= all the time	$4 = about \ a \ day$
5 = more than a day	

20. I cannot feel properly the objects that I touch with my hands, for it feels *as if it were not me* who were touching it.

Frequency	Duration
0 = never	In general, it lasts:
1 = rarely	$1 = few\ seconds$
2 = often	2 = few minutes
3 = very often	3 = few hours
4= all the time	$4 = about \ a \ day$
5 = more than a day	

21. I do not seem able to picture things in my mind, for example, the face of a close friend or a familiar place.

Frequency	Duration
0 = never	In general, it lasts:
1 = rarely	$1 = few \ seconds$

2 = often 2 = few minutes 3 = very often 3 = few hours 4 = about a day

5 = more than a day 6 = more than a week

6 = more than a week

22. When a part of my body hurts, I feel so detached from the pain that it feels as if it were 'somebody else's pain.'

# FrequencyDuration0 = neverIn general, it lasts:1 = rarely1 = few seconds2 = often2 = few minutes3 = very often3 = few hours4 = all the time4 = about a day5 = more than a day6 = more than a week

23. I have the feeling of being outside my body.

	O	O	J
Frequency			Duration
0 = never			In general, it lasts:
1 = rarely			$1 = few\ seconds$
2 = often			2 = few minutes
3 = very often			3 = few hours
4= all the time			$4 = about \ a \ day$
5 = more than a day	у		
6 = more than a we	ek		

24. When I move it doesn't feel as if I were in charge of the movements, so that I feel 'automatic' and mechanical as if I were a 'robot'.

Frequency	Duration
0 = never	In general, it lasts:
1 = rarely	$1 = few \ seconds$
2 = often	2 = few minutes
3 = very often	3 = few hours
4= all the time	$4 = about \ a \ day$
5 = more than a day	

25. The smell of things no longer gives me a feeling of pleasure or dislike.

# FrequencyDuration0 = neverIn general, it lasts:1 = rarely1 = few seconds2 = often2 = few minutes3 = very often3 = few hours4 = all the time4 = about a day5 = more than a day

6 = more than a week

26. I feel so detached from my thoughts that they seem to have a 'life' of their own.

Frequency	Duration
0 = never	In general, it lasts:
1 = rarely	$1 = few \ seconds$
2 = often	2 = few minutes
3 = very often	3 = few hours
4= all the time	$4 = about \ a \ day$
5 = more than a day	
6 = more than a week	

27. I have to touch myself to make sure that I have a body or a real existence.

Frequency	Duration
0 = never	In general, it lasts:
1 = rarely	$1 = few \ seconds$
2 = often	2 = few minutes
3 = very often	3 = few hours
4= all the time	$4 = about \ a \ day$
5 = more than a day	Ç
6 = more than a week	

28. *I seem to have lost* some bodily sensations (e.g. of hunger and thirst) so that when I eat or drink, it feels like an automatic routine.

Frequency	Duration
0 = never	In general, it lasts:
1 = rarely	$1 = few\ seconds$
2 = <i>often</i>	2 = few minutes

3 = very often

3 = few hours

4= all the time

 $4 = about \ a \ day$ 

5 = more than a day 6 = more than a week

29. Previously familiar places look unfamiliar, as if I had never seen them before.

#### Frequency

#### Duration

0 = never

In general, it lasts:

1 = rarely

 $1 = few \ seconds$ 

2 = often

2 = few minutes

3 = very often

3 = few hours

4= all the time

 $4 = about \ a \ day$ 

5 = more than a day

6 = more than a week

Per email correspondence with the first author, permission to use the scale was granted on 6/10/13. The first author also stated that no permission is required to use the scale, as it is free access.

#### Four-Dimensional Symptom Questionnaire (4DSQ)

The following is a list of questions about various complaints and symptoms you may have. Each question refers to the complaints and symptoms that you had **in the past week (the past 7 days, including today)**. Complaints you had before then, but no longer had during the past week, do not count. Please indicate for each complaint how often you noticed that you had it in the past week.

по	sometimes	regularly	often	very often or constantly				
1	2	3	4	5				
During	the past weel	k, did you suf	fer from:					
1. dizzin	ess or feeling	; light-headed	?					
1	2	3	4	5				
2. painfu	ıl muscles?							
1	2	3	4	5				
3. faintir	ng?							
1	2	3	4	5				
4. neck p	pain?							
1	2	3	4	5				
5. back p	pain?							
1	2	3	4	5				
6. excess	6. excessive sweating?							
1	2	3	4	5				
7. palpit	ations?							
1	2	3	4	5				
8. heada	che?							
1	2	3	4	5				
9. a bloa	ted feeling in	the abdomen	?					
1	2	3	4	5				
10. blurred vision or spots in front of your eyes?								
1	2	3	4	5				
11. short	11. shortness of breath?							
1	2	3	4	5				
12. naus	ea or an upse	t stomach?						
1	2	3	4	5				

Permission to use this scale for research purposes is granted for non-commercial use, per email correspondence with the primary author.

#### **Body Awareness Questionnaire**

Please indicate the degree to which you agree with each statement, ranging from 1 (not at all true about me) to 7 (very true about me):

Not a	t				٦	Very tri	ie
all tru	ıe				ı	about m	e
about	те						
1	2	3	4	5	6	7	
1. I no	otice d	ifferer	nces in t	the wa	y my bo	ody rea	cts to various foods.
1	2	3	4	5	6	7	
2. I ca	ın alwa	ays tel	l when	I bum	p myse	lf whet	her or not it will become a bruise.
1	2	3	4	5	6	7	
3. I al	ways l	know	when I	ve exe	rted my	yself to	the point where I'll be sore the next
day.							
1	2	3	4	5	6	7	
4. I ar	n alwa	iys aw	are of o	change	s in my	energy	y level when I eat certain foods.
1					6	7	
5. I kı	now in	adva	nce wh	en I'm	getting	the flu	ı <b>.</b>
1	2	3	4	5	6	7	
6. I kı	now I'ı	m run	ning a f	fever w	vithout	taking	my temperature.
1	2	3	4	5	6	7	, I
7. I ca	n disti	inguis	h betw	een tire	edness l	becaus	e of hunger and tiredness because of
lack o	of sleep	).					
1	2	3	4	5	6	7	
8. I ca	ın accu	ırately	predic	t what	time o	f day la	ick of sleep will catch up with me.
1	2	3	4	5	6	7	
9. I ar	n awa	re of a	cycle i	n my a	ctivity	level th	roughout the day.
1	2	3	4	5	6	7	
10. I a	don't no	otice s	easona	l rhyth	ms and	l cycles	in the way my body functions. (R)
1	2	3	4	5	6	7	
11. A	s soon	as I w	ake up	in the	mornir	ng I kno	ow how much energy I'll have
durin	g the o	day.	-				9.
1	2	3	4	5	6	7	
12. I d	can tell	wher	I go to	bed h	ow wel	ll I will	sleep that night.
1	2	3	4	5	6	7	
1	_	3	4	3	O	/	

13. I	notice	distin	ct body	reaction	ons wh	en I ar	n fatigued.
1	2	3	4	5	6	7	
14. I	notice	specifi	ic body	respon	nses to	chang	es in the weather.
1	2	3	4	5	6	7	
15. I	can pro	edict h	ow mu	ich slee	ep I wil	l need	at night in order to wake up
refre	shed.						
1	2	3	4	5	6	7	
16. V	Vhen m	ıy exei	rcise ha	bits ch	ange, I	can p	redict very accurately how that will
affec	t my e	nergy	level.				
1	2	3	4	5	6	7	
17. T	here se	eems to	o be a "	best" t	ime for	me to	go to sleep at night.
1	2	3	4	5	6	7	
18. I	notice	specifi	ic bodil	y react	ions to	being	over-hungry.
1	2	3	4	5	6	7	
	(R) =	rever	se-scor	ed			

Permission to use this measure was obtained on 6/10/13 via email correspondence with the first author.

#### **Body Experience Questionnaire**

Please indicate the degree to which you agree with each statement, ranging from 1 (totally disagree) to 4 (totally agree):

Totally			Totally
disagree			agree
1	2	3	4
1. My bo	ody is a burd	en to me. (R)	
1	2	3	4
2. It feel	s as if my bo	ody doesn't bel	ong to me. (R)
1	2	3	4
3. I don'	t feel compl	ete. (R)	
1	2	3	4
4. My bo	ody is unpre	edictable. (R)	
1	2	3	4
5. I feel	betrayed by	my body. (R)	
1	2	3	4
6. I wou	ıld like to ha	ve a different b	ody. (R)
1	2	3	4
7. I reflec	ct on what is	good for my b	ody.
1	2	3	4
8. My bo	dy lets me k	cnow what is g	ood for me.
1	2	3	4
9. I am s	sensible to m	ıy body.	
1	2	3	4
10. My l	oody feels fa	miliar to me.	
(R) = rev	erse-scored		
Alienatio	on subscale:	Items 1-6	

Harmony subscale: Items 7-10

#### **Sexuality Awareness Scale**

The items below refer to the sexual aspects of people's lives. Please read each item carefully and decide to what extent it is characteristic of you. Give each item a rating of how much it applies to you by using the following scale:

0 = Not at all characteristic of me
1 = Slightly characteristic of me
2 = Somewhat characteristic of me
3 = Moderately characteristic of me
4 = Very characteristic of me
1. I am very aware of my sexual feelings.
2. I wonder whether others think I am sexy.
3. I am assertive about the sexual aspects of my life.
4. I am very aware of my sexual motivations.
5. I am concerned about the sexual appearance of my body.
6. I am not very direct about voicing my sexual desires. (R)
7. I am always trying to understand my sexual feelings.
8. I know immediately when others consider me sexy.
9. I am somewhat passive about expressing my sexual desires. (R)
10. I am very alert to changes in my sexual desires.
11. I am quick to sense whether others think I am sexy.
12. I do not hesitate to ask for what I want in a sexual relationship.
13. I am very aware of my sexual tendencies.
14. I usually worry about making a good sexual impression on others.

15. I am the type of person who insists on having my sexual needs met.
16. I think about my sexual motivations more than most people do.
17. I am concerned about what others think of my sex appeal.
18. When it comes to sex, I usually ask for what I want.
19. I reflect about my sexual desires a lot.
20. I never seem to know when I'm turning others on.
21. If I were sexually interested in someone, I would let that person know.
22. I am very aware of the way my mind works when I'm sexually aroused.
23. I rarely think about my sex appeal. (R)
24. If I were to have sex with someone, I would tell my partner what I like.
25. I know what turns me on sexually.
26. I don't care what others think of my sexuality.
27. I don't let others tell me how to run my sex life.
28. I rarely think about the sexual aspects of my life.
29. I know when others think I'm sexy.
30. If I were to have sex with someone, I would let my partner take the initiative. (R)
31. I don't think about my sexuality very much. (R)
32. Other people's opinions of my sexuality don't matter very much to me. (R)

33. I would ask about a sexually transmitted diseases before having sex
with someone.
34. I don't consider myself a very sexual person.
35. When I'm with others, I want to look sexy.
36. If I wanted to practice, "safe sex" with someone, I would insist on doing so.
Sexual consciousness subscale: 1, 4, 10, 13, 22, 25
Sexual monitoring subscale: 2, 5, 14, 17, 23, 26, 28, 31, 32
Sexual assertiveness subscale: 3, 6, 9, 12, 15, 18, 24
Sexual appeal subscale: 8, 11, 29

Permission to use this scale for research purposes is granted online.

### **Demographics** Please answer the following questions: Gender: \_\_\_Male Female <u>Age</u>: \_\_\_\_\_ **Ethnicity**: \_\_\_Caucasian/European American \_\_\_Black/African American \_\_\_Hispanic/ Latino/ Latina \_\_\_Asian/ Asian American \_\_\_Mixed (please indicate): \_\_\_\_\_ \_\_\_Other (please indicate): \_\_\_\_\_ Sexual orientation: \_\_\_Heterosexual \_\_\_Gay/Lesbian \_\_\_Bisexual \_\_\_Other: \_\_\_\_\_ Marital Status: \_\_\_Married \_\_\_Divorced \_\_\_Widow/ Widowed \_\_\_Dating/ engaged \_\_\_Single/ never married Number of sexual partners in past month:

Highest level of education completed:
High school
Some college
College
M.A. or equivalent
Doctorate
Religious affiliation:
Protestant
If so, please indicate denomination:
Catholic
Orthodox Christian
Jewish
Muslim
Buddhist
Agnostic
Atheist
Other:
· <del></del>
Please indicate whether you currently participate in the following activities:
Varsity/ club-level athletics
Years involved:
Dance (e.g. ballet, tap, jazz)
Years involved:
Long-distance running (e.g. half-marathons, marathons)
Years involved:
Please indicate whether you have ever participated in the following activities:
Varsity/ club-level athletics
Years involved:
Dance (e.g. ballet, tap, jazz)
Years involved:
Long-distance running (e.g. half-marathons, marathons)
Vears involved:

I exercise or participate in sports:

Never	Occasionally	Once a week	Every day
1	2	3	4

Please indicate how often you engage in the following activities:

Never	Rarely	Monthly	Weekly	Daily	_
1	2	3	4	5	
Contempor	lative 1	2	3	4	5
Meditatio	on 1	2	3	4	5
Fasting	1	2	3	4	5
Study of the Bible	1	2	3	4	5

# APPENDIX B

# MANUSCRIPT SUITABLE FOR PUBLICATION

Temple or Prison: Religious Attitudes and Bodily Attitudes and Experiences

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### Abstract

Previous research on religion and the body has tended to focus generally on the relationship between religiosity and body image or eating behaviors. The present study, in contrast, examines two religiously influenced attitudes toward the body, radical dualism and sanctification, and focuses on people's attitudes toward and experiences of their body, rather than on behaviors. Participants were 243 Protestant adults. Using an online survey system and self-report measures, participants indicated the degree to which they hold radically dualistic and sanctified views about their bodies as well as how they think about and experience their bodies. Radical dualism was negatively related to body satisfaction and sexuality awareness and positively related to body shame, depersonalization, and lack of body awareness. Sanctification predicted body satisfaction and internal body awareness. This study contributes to a greater understanding of how religiously based attitudes about the body are related to experiences of the body.

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Temple or Prison: Religious Attitudes and Bodily Attitudes and Experiences

Previous research has demonstrated links between religiosity and embodiment, though many of these studies focused on very specific body-related concerns, such as body image and eating disorders or weight concerns among women (Boyatzis, Kline, & Backof, 2007; Boyatzis & McConnell, 2006; Boyatzis & Quinlan, 2008; Boyatzis, Trevino, Manning, & Quinlan, 2006; Cottingham, 2008; Jacobs-Pilipski, Winzelbert, Wilfey, Bryson, & Taylor, 2005; Joughin, Crisp, Halek, & Humphrey, 1992; Kim, 2006, 2007; Smith, Richards, & Maglio, 2004). These studies have found largely positive relationships between different aspects of religiosity and body image. In addition, studies that focused specifically on the spiritual and religious beliefs women hold demonstrate these are positively related to ways in which they cope with body image distress (Boyatzis et al., 2007; Boyatzis et al., 2006; Jacobs-Pilipski et al., 2005; Kim, 2006). A few studies have looked at how religious beliefs are related to other aspects of embodiment beyond body image (Hernandez, Mahoney, & Pargament, 2011; Jacobson et al., 2013; Murray-Swank, Pargament, & Mahoney, 2005), and have shown that religious beliefs which highlight the importance of the body are positively related to how people think about and experience their bodies. All of these

studies used largely generic measures of spiritual beliefs, applicable across a wide range of religious traditions, and have focused on positive religious beliefs.

Mahoney et al. (1999) argued that *proximal* measures of religion (e.g., assessing particular religious views on a topic) are superior to distal concepts (e.g., assessing frequency of attending religious services) in understanding the influence of religion on areas of human functioning such as the body. Articulating both distal and proximal concepts of religion is particularly relevant in understanding the influence of religion on people's experiences of their body. Kim (2006, 2007) has likewise argued that it is important to articulate specific nuances of religious beliefs as a way of further understanding how men and women think about and experience their bodies. While the positive link between religion and body image is well-established, more research is needed to address whether particular religious beliefs about the body (both positive and negative) have differing relationships to attitudes toward the body, and whether they are also related to other, more phenomenological aspects of embodiment. In particular, the question addressed in this study is how specific attitudes within a religious tradition are connected to the ways people think about and experience their bodies. This study is the first to examine negative religious beliefs about

the body, and one of the first to examine the relationship between religious beliefs and phenomenological aspects of embodiment.

## Radical Dualism and Sanctification

Hall and Thoennes (2006) identified two attitudes regarding the body within Christianity. The first is that of "radical dualism" which perceives the body and the soul as radically separate from each other and regards the material world (including the body) as inherently evil or corrupt, while the spiritual world is seen as the ideal. Hall and Thoennes argued that this radical dualism has had pervasive effects in some segments of contemporary Christianity; for example, a belief in salvation as release from the body (seeing heaven as a merely spiritual existence) and elevation of bodily sins above other sins such as gossip. Two studies that examined radically dualistic beliefs demonstrated these do exist within Christian populations and the presence of these views are related to discomfort with the idea that Jesus had a body as well as reminders of bodily functions and mortality (Beck, 2008, 2009).

Another view present in Christian teachings is that of the person as a psychosomatic unity. This view sees the body and soul as intricately connected and together impacted by sin and redeemed (Clarke, 2010; Cox, 2002; Greenwood & Delgado, 2011; Hall & Thoennes, 2006; Malony, 1998). Malony

(1998) emphasized the physical basis for spirituality and advocated for an understanding of human beings as body-soul unities. Clarke (2010) asserted that body-soul unity has implications for mental health care, as that which affects the body also affects the spirit. Drawing on the work of Mahoney et al. (2005), Jacobson et al. (2013) suggested that the psychological construct of sanctification of the body seems to capture this more positive perspective on embodiment represented in Christian theology. Pargament and Mahoney (2005) defined sanctification as perceiving something as having divine significance and character. Sanctification may be theistic in nature (seeing something as a manifestation of one's images, beliefs, or experiences of God) or non-theistic in nature (something is imbued with value, purpose, or transcendence). Sanctification also involves investing time and energy in something in order to protect and preserve it. Jacobson et al. (2013) and Mahoney et al. (2005) found links between sanctification of one's body and increased body satisfaction, decreased body objectification and depersonalization, and engaging in healthrelated behaviors. In both studies, the authors noted that this may be due in part to various Christian teachings which encourage people to view their bodies as worthy and acceptable in God's eyes.

## Attitudes Toward and Experiences of the Body

In order to expand the existing research on particular religious views and other aspects of embodiment, we chose to examine two body attitude constructs, body satisfaction and body shame, as well as three phenomenological body experience constructs: (a) depersonalization; (b) internal awareness of bodily sensations; and (c) sexuality awareness.

**Body satisfaction.** Body satisfaction, or how people evaluate their bodies and how they imagine others evaluate them, has been linked to global religiosity and intrinsic orientation (Boyatzis et al., 2007; Homan & Boyatzis, 2009; Jacobs-Pilipski et al., 2005; Mahoney et al., 2005; Smith et al., 2004; Zhang, 2012). Studies have found that women who report strong religious beliefs and practices are likely to engage in them as a way to cope with body image distress (Jacobs-Pilipski et al., 2005; Kim, 2006). Boyatzis et al. (2007) found that women who read affirming, religious and spiritual messages about their bodies reported experiencing higher body esteem and feeling better about their appearance than those who did not. Both Mahoney et al. (2005) and Jacobson et al. (2013) found that sanctification was linked to increased body satisfaction, suggesting that viewing one's body as sacred and worthy of respect has positive implications for evaluating and feeling satisfied with one's body.

Body shame. Calogero and Pina (2011) defined body shame as appraising one's body as bad or inadequate, resulting in a desire to escape or hide from others. Body shame has been linked to disordered eating and body objectification (Calogero & Pina, 2011; McKinley & Hyde, 1996; Noll & Fredrickson, 1998). In general, research has shown that women tend to report higher levels of body shame than do men (Thompson et al., 2003); interestingly, Boisvert and Harrell (2012) found that body shame was significantly linked to lower spirituality among men. To date no other research has examined possible links between religiosity and body shame.

Depersonalization. Depersonalization, or dissociation from one's body, is a way of experiencing one's body as disconnected from oneself. Though often researched in relation to trauma, depersonalization is a common phenomenon within the general population, especially among young, female students (Haven, 2009; Hunter, Sierra, & David, 2004; Price & Thompson, 2007). Price and Thompson (2007) found that connection to one's body was linked to reduced body dissociation over time. Jacobson et al. (2013) found that sanctification was negatively linked to depersonalization in a sample of college students, highlighting the importance of religiously-influenced perceived connection to

one's body. No research to date has explored this relationship in a broader population.

Internal body awareness. Another important way of experiencing one's body relates to one's awareness of internal bodily sensations such as hunger, stress, and fatigue. Price and Thompson (2007) emphasized the importance of the mind-body connection in attending to one's bodily awareness. Jacobson et al. (2013) found that for college-age men, internal body awareness was related to sanctification. The authors suggested that "paying attention to body cues requires regularly monitoring one's body and being attentive to internal cues, actions consistent with a sanctified view of the body" (Jacobson et al., 2013, p. 42). On the other hand, they suggest that seeing the body as corrupt and separate from oneself might lead to attempts to decrease attentiveness to bodily sensations such as hunger or fatigue; this hypothesis has not yet been explored empirically.

**Sexuality.** While religion may be a key factor in understanding the meaning people attribute to sexuality (Freitas, 2008; Yarhouse, 2005), few studies have examined the connection between attitudes about the body within Christianity and one's experience of sexuality (Horn et al., 2005; Murray-Swank et al., 2005). Whereas empirical studies have supported the idea that

religiousness inhibits the expression of sexuality outside of marriage (Baier & Wampler, 2008; Daniluk, 1993; Davidson, Darling, & Norton, 1995; Paul, Fitzjohn, Eberart-Phillips, Herbison, & Dickson, 2000; Regenerus, 2007; Schultz, Bohrnstedt, Borgatta, & Evans, 1977), these studies have generally failed to address how religious variables relate to an individual's sexual experience of his or her own body, as opposed to sexual behaviors. Within the Judeo-Christian tradition sexuality has typically been considered to be a holistic experience involving both the body and the soul, though little empirical research exists regarding this view (Murray-Swank et al., 2005). Studies have shown links between sanctification and a higher frequency of engaging in intercourse, higher satisfaction with sexual activity, and higher marital satisfaction (Hernandez et al., 2011; Murray-Swank et al., 2005) but to date no studies have looked at possible links between religiously-influenced attitudes and one's experience of sexual awareness.

## The Present Study

The purpose of the present study was to examine the relationship between people's attitudes and experiences of their body and the Christian views of sanctification and radical dualism. We hypothesized that radical dualism would be negatively correlated with the attitude of body satisfaction, positively

correlated with the attitude of body shame, positively correlated with depersonalization, and negatively correlated with the experiences of internal body awareness and sexuality awareness. Conversely, we hypothesized that sanctification would be positively correlated with the attitude of body satisfaction, negatively correlated with the attitude of body shame, negatively correlated with the depersonalization, and positively correlated with internal body awareness and sexuality awareness. Finally, it was hypothesized that sanctification and radical dualism, as attitudes directly related to the body, would be related to attitudes and experiences of the body above and beyond the more general constructs of religious commitment and intrinsic/extrinsic religiosity. With few exceptions (Boisvert & Harrell, 2012; Homan & Boyatzis, 2009; Jacobson et al., 2013), existing research has focused on college-aged females. The present study also extends existing research by examining these issues in the general population, and among men as well as women.

#### Method

## **Participants**

Participants were 243 adults. One hundred fifty-eight participants (65%) were female, 65 (27%) were male, and 20 (8%) did not indicate their gender. Of participants surveyed, 211 (87%) self-identified as Caucasian/European

American, 11 (5%) as Asian/Asian American, 2 (1%) as "Mixed," 1 (<1%) as Hispanic/Latino/Latina, and none as Black/African American. Ages ranged from 18 to 80 years with an average age of 37 years (SD = 14.10).

One hundred fifty-nine (65%) participants reported being married, 45 (19%) were single or never married, 16 (7%) participants were dating or engaged, 5 (2%) reported being divorced, and 1 (<1%) was a widow/widower. Of those surveyed, 14 (6%) had a doctorate degree, 79 (33%) had an MA or equivalent degree, 118 (49%) were college graduates, 13 (5%) reported some college education, 2 (1%) had a high school degree, and 17 (7%) did not specify their level of education. Two hundred twenty (91%) participants self-identified as heterosexual, with 2 (1%) identifying as gay or lesbian, 2 (1%) as bisexual, and 1 (<1%) as "Other."

## **Procedure**

A link to the study was emailed to contacts who work in Christian organizations, are enrolled in Christian schools, and/or who attend Christian churches. Participants were recruited from across the United States and came from a variety of denominations within the Protestant religious tradition including Baptist, Presbyterian, Evangelical Free, Lutheran, Methodist, and Non-Denominational.

### Measures

# Measures of religious attitudes.

Radically dualistic attitudes toward the body. The Radical Dualism Scale was a measure designed for the current study to assess the extent to which participants hold radically dualistic views about their bodies. Participants rate 12 items using a 7-point scale ranging from 1 (*strongly disagree*) to 7 (*strongly* agree). Items include the following statements: My body is just something I live in here on earth; My body is basically sinful; My soul is more important to God than my body; I can hardly wait to escape my body when I die; My body frequently causes me to sin; I do not see my body as important in the process of spiritual formation; My body is an important part of me (reverse-scored); God did not intend for us to be in our bodies forever; Often, I cannot control my body's urges; It seems that sins of the body, such as sexual sin, are worse than other kinds of sins; When I'm making a decision, I do not take into account my emotions, only my rational thoughts; I'm engaged in a life-long struggle to subdue the lusts of the body. In this study, the Radical Dualism Scale obtained an alpha coefficient of .79. Scores are obtained by calculating the mean for all items. Higher scores represent a higher level of radically dualistic thinking regarding one's body. When correlated with the three measures of sanctification used in this study, the Radical Dualism Scale was significantly correlated with the

Christian Teachings on the Body Scale (r = -.16, p < .01) but not with either the Sacred Qualities of the Body Scale (r = -.09, p = .08) or the Manifestation of God in the Body Scale (r = .01, p = .46).

Sanctification of the body. Three measures were used to operationalize sanctification. The Sacred Qualities of the Body scale (Mahoney et al., 2005) was used to measure sanctification of the body and is comprised of 10 items that assess the degree to which the body is perceived as having sacred or divine qualities. Using a 7-point Likert scale ranging from 1 (does not describe at all) to 7 (very closely describes), participants indicate the degree to which they feel specific words apply to their body: blessed, holy, sacred, spiritual, miraculous, divine, hallowed, spirit-filled, heavenly, and religious. This scale makes no mention of God, a higher power, or any divine being. It was normed on a comparable sample and had an alpha coefficient of .95 in the original sample and .85 in the current sample. A total score is obtained by calculating a mean for the 10 items. Higher scores represent a higher perception of the body as having sacred qualities.

The Manifestation of God in the Body Scale (Mahoney et al., 2005) was used to measure the degree to which the body is perceived as an expression or manifestation of God. It is an explicitly theistic scale, including 12 items such as *My body is a gift from God; God is glorified through my body.* This scale is neutral

about the direction of influence of God on the body. Participants rate items on a 7-point scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). It was normed on a comparable sample and had an alpha coefficient of .98. In the present study it had an alpha coefficient of .89. A total score is obtained by calculating a mean for the twelve items, with higher scores representing a greater perception of the body as a manifestation of God.

The Christian Teachings on the Body Scale measures the extent to which a participant endorses explicitly Christian teachings about his or her body, in contrast to the more generically-worded items of the other two sanctification measures. It was derived from a factor analysis of an earlier version of the Radical Dualism Scale (Jacobson, 2011) than the one used in the present study, the Sacred Qualities of the Body Scale, and the Manifestation of God in the Body Scale. It is comprised of 14 items rated on a 7-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree). Items taken from the Sacred Qualities of the Body Scale include the following: My body is miraculous; My body is Spiritfilled; My body is blessed; My body is holy. Items taken from the Manifestation of the God in the Body Scale include the following: My body is a temple of God; My body is a gift from God; God is glorified through my body (modified to I glorify God through my body). Seven items new to this scale include: My body is a living

sacrifice to God; I serve God through my body; It does not matter what I do with my body (reverse-scored); I can do whatever I want with my body (reverse-scored); I honor God through my body; My body is a temple of the Holy Spirit; My body is fearfully and wonderfully made. Total scores are calculated by obtaining a mean for all items, with higher scores representing a higher endorsement of explicitly Christian teachings about the body. No information regarding reliability and validity existed previously for this scale; in the present study, it obtained an alpha coefficient of .91. The Christian Teachings on the Body Scale was positively correlated with both the Sacred Qualities of the Body Scale (r = .59, p < .001) and the Manifestation of God in the Body Scale (r = .73, p < .001).

Religious commitment. The Religious Commitment Inventory

(Worthington et al., 2003) measures the degree to which individuals are deeply committed to their religious beliefs and practices. Using a 5-point scale ranging from 1 (not at all true of me) to 5 (totally true of me), participants rate 10 items such as the statement, Religious beliefs influence all my dealings in life. Although the Religious Commitment Inventory has two subscales (Intrapersonal and Interpersonal), only the total score was used in the present study. This scale was normed on 155 undergraduates and had an alpha coefficient of .93 for the total scale in the original sample and .89 in the current study. Total scores for the

overall measure are obtained by calculating a mean for item scores. Higher scores indicate more commitment to one's religious beliefs and practices.

*Religious orientation.* The Intrinsic/Extrinsic-Revised Scale (Gorsuch & McPherson, 1989) is a revised version of the Allport and Ross (1967) Religious Orientation Scale. It is designed to assess the level of intrinsic and extrinsic religious commitment of a participant. This scale consists of 14 items, eight intrinsic items (alpha = .83 in the original sample, .76 in the current sample) and six extrinsic (alpha = .65 in the original sample and .66 in the current sample) items. All items are rated on a 5-point scale that range from 1 (*strongly disagree*) to 5 (strongly agree). Examples of items include, I go to church because it helps me to make friends (extrinsic); I have often had a strong sense of God's presence (intrinsic). This scale was normed on 771 college students from both secular and religious institutions. The alpha of .66 obtained in the current sample is low but is similar to that obtained in the original sample. In spite of the low alpha, the scale is the most widely used measure of extrinsic religiosity in the literature and thus was used in the present study in spite of the alpha. Total scores were obtained by reverse-scoring as indicated and taking a mean of the items in each subscale, with higher scores representing higher levels of either intrinsic or extrinsic religious orientation.

**Measures of body attitudes.** Two measures of body attitudes were used, one each for body satisfaction and body shame.

Body satisfaction. The Body Appreciation Scale (BAS; Avalos, Tylka, & Wood-Barcalow, 2005) consists of 13 items that measure a person's respect for and satisfaction with his or her body. Items are ranked on a 5-point scale ranging from 1 (never) to 5 (always) and consist of statements such as, I feel good about my body and I take a positive attitude toward my body. The BAS was normed on 181 college women (average age = 20.24) and had an alpha coefficient of .94 (alpha = .91 in the present study). A total score for this measure is obtained by reverse-scoring items as indicated and calculating a mean for all items. Higher scores indicate a greater sense of appreciation and respect for one's body. It should be noted that to date, no studies have used the BAS with men; the authors stated that when giving this scale to men, researchers should revise item 12. The original item reads, I do not allow unrealistically thin images of women presented in the media to affect my attitudes toward my body. As it currently stands, this item reads, [If you are a woman] I do not allow unrealistically thin images of women presented in the media to affect my attitudes toward my body; [If you are a man] I do not allow unrealistically muscular images of men presented in the media to affect my attitudes toward my body.

Body shame. The Objectified Body Consciousness Scale (McKinley & Hyde, 1996) consists of 24 items designed to measure body objectification. The Objectified Body Consciousness scale includes three subscales; only the Body Shame subscale was used in this study, as the authors suggest it closely measures a respondent's level of internalization of cultural standards. The Body Shame subscale had an alpha of .75 in the original study and .71 in the current study. Participants use a 7-point scale ranging from 1 (strongly disagree) to 7 (strongly agree) to rate statements such as the following, I would be ashamed for people to know what I really weigh and I feel like I must be a bad person when I don't look as good as I could. This measure was originally normed on 502 undergraduate women. Subscale scores are calculated by reverse-scoring items as indicated and then calculating a mean for the items. Higher scores indicate the presence of body shame.

**Measures of bodily experiences.** Three measures of bodily experiences were used, one for depersonalization, one for internal awareness, and one for sexuality awareness.

Depersonalization. The Cambridge Depersonalization Scale (Sierra & Berrios, 2000) consists of 29 items designed to assess the frequency and duration of depersonalization symptoms over the last six months. Respondents rate the

frequency (4-point scale; 0= never; 4=all the time) and duration (6-point scale; 0 = a few seconds; 3 = a few hours; 6 = more than a week) of symptoms. Examples of items include: Parts of my body feel as if they didn't belong to me; When I weep or laugh I do not seem to feel any emotions at all. The Cambridge Depersonalization Scale was normed on 35 patients with the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV; American Psychiatric Association, 1994) depersonalization disorder, 22 with anxiety disorders, and 20 with temporal lobe epilepsy. The alpha coefficient for this scale was alpha = .89 in the original study and .92 in the present study. Total scores are obtained by calculating a mean for all items. Higher scores indicate greater levels of depersonalization. For the present study, only frequency of symptoms was assessed.

Body awareness. The Body Experience Questionnaire (Bode, Van der Heij, & Van de Laar, 2010) consists of 10 items that measure alienation and harmony experiences of one's body. Items are rated on a 4-point scale ranging from 1 (totally disagree) to 4 (totally agree). This scale consists of two subscales, Alienation and Harmony. The Alienation subscale contains six items; examples of items include, My body is a burden to me; I feel betrayed by my body (alpha = .84 in the original sample, .80 in the present study). The Harmony subscale consists of four items such as, My body lets me know what is good for me; My body feels familiar

to me (alpha = .76 in the original sample, .78 in the present study). This scale was normed on 168 patients in an outpatient rheumatology clinic. Total scores are obtained by calculating a mean for all items for each subscale, with higher scores indicating higher levels of perceived alienation from or harmony with one's body.

Sexuality awareness. The Sexuality Awareness Scale (Snell, Fisher, & Miller, 1991) was designed to measure personality tendencies associated with sexual awareness and assertiveness. It consists of 36 items ranked on a 5-point scale ranging from 0 (not at all characteristic of me) to 4 (very characteristic of me). Participants rate how well each statement represents them; for example, I am very aware of my sexual feelings; I usually worry about making a good sexual impression on others. For the purposes of this study, only the Sexual Monitoring subscale was used (alpha = .80 - .82 in the original study; alpha = .71 in the present study). The Sexuality Awareness Scale was normed on two samples consisting of a total of 772 undergraduates. Scores from each subscale are obtaining by calculating a mean for the items; higher scores on each subscale represent higher levels of the respective tendency measured.

**Demographics**. On a demographic survey participants indicated their gender, age, ethnicity, education level, marital status, sexual orientation, and

frequency of sexual intercourse within the last month. They were also asked to identify their religious tradition and denomination if part of the Protestant tradition.

#### Results

## **Preliminary Analyses**

The original non-transformed means and standard deviations for all measures are shown in Table B1. All measures were assessed for normality and homoscedasticity. The Cambridge Depersonalization Scale, the Body Experience Questionnaire-Alienation subscale, and the Sexual Monitoring subscale were found to be positively skewed. Square root transformations corrected the Cambridge Depersonalization Scale, while logarithmic transformations corrected the Body Experience Questionnaire-Alienation subscale. Inverse transformations were conducted to correct the Sexual Monitoring subscale.

The Religious Commitment Inventory, the Manifestation of God in the Body Scale, the Christian Teachings on the Body Scale, and the Body Experience-Harmony subscale were found to be negatively skewed. Before any transformations were conducted, all of these measures were reflected by subtracting the mean of each score from the highest score attained, plus one. This reflected the data so that it became positively skewed and thus able to be

transformed. Reflecting the data in this way changed the meaning of the scores for these measures, so in order to avoid confusion when interpreting results between multiple reflected measures, the scores for these measures were re-reflected after being transformed.

A square root transformation corrected for the skewness in the Manifestation of God in the Body Scale, the Sexual Consciousness subscale, and the Body Experience-Harmony subscale. Logarithmic transformations corrected the Religious Commitment Inventory and the Christian Teachings on the Body Scale. The transformed and re-reflected scores for all of these measures were utilized in all subsequent analyses.

# First Hypothesis

First, we hypothesized that radical dualism would be negatively correlated with the attitude of body satisfaction, positively correlated with the attitude of body shame, positively correlated with depersonalization, and negatively correlated with the experiences of internal body awareness and sexuality awareness. This hypothesis was partially supported; out of seven analyses run, five were significant. One-tailed, zero-order correlations were run to assess the relationships between the Dualism Scale and the seven scales and subscales reflecting attitudes and experiences of the body. Results are shown in

Table B2. Bonferroni corrections were calculated by dividing .05 by the number of correlational analyses run for both body attitudes (two) and body experiences (four) with radical dualism. The resulting cutoff values were p < .03 for body attitudes and p < .01 for body experiences.

For body attitudes, the Dualism Scale was found to be negatively correlated with body satisfaction, as measured by the Body Appreciation Scale (r = -.25, p < .001). It was also positively correlated with body shame, as measured by the Objectified Body Consciousness-Shame subscale (r = .26, p < .001). For body experiences, dualism was positively correlated with depersonalization as measured by the Cambridge Depersonalization Scale (r = .19, p < .003) and lack of internal body awareness, as measured by the Body Experience Questionnaire-Alienation subscale (r = .30, p < .001). Radical dualism was significantly correlated with sexuality awareness, as measured by the Sexual Monitoring subscale (r = -.17, p = .005).

## **Second Hypothesis**

We also hypothesized that sanctification would be positively correlated with the attitude of body satisfaction, negatively correlated with the attitude of body shame, negatively correlated with depersonalization, and positively correlated with the experiences of internal body awareness and sexuality

awareness. This hypothesis was partially supported; out of seven analyses run,

three were significant.

In order to avoid the high likelihood of a Type 1 error due to running multiple correlation analyses, a series of hierarchical regressions was run to see if sanctification would significantly predict the outcome variables. Due to the overlap of several items on the three sanctification scales, items on the Christian Teachings on the Body Scale that duplicated those on the Sacred Qualities of the Body Scale and the Manifestation of God in the Body Scale were removed from those scales prior to running the analyses. The adjusted sanctification scales were then used for testing this hypothesis, as well as for the third hypothesis. The three measures of sanctification were entered as the independent variable and each outcome measure of either body attitudes or body experiences was entered as the dependent variable. Results are shown in Table B3. Bonferroni corrections were calculated, resulting in cutoff values of p < .03 for body attitudes and p < .01 for body experiences.

For body attitudes, sanctification significantly predicted body satisfaction as measured by the Body Appreciation Scale ( $\beta$  = .35, p < .001) but did not significantly predict body shame. For body experiences, sanctification predicted internal body awareness as measured by the Body Experience Questionnaire -

Alienation subscale ( $\beta$  = -.28, p < .002) and the Body Experience Questionnaire-Harmony subscale ( $\beta$  = .37, p < .001). In each case, most of the variance was accounted for by the Christian Teachings on the Body Scale, rather than the two more general sanctification scales. Sanctification did not significantly predict depersonalization or sexuality awareness.

# **Third Hypothesis**

We also hypothesized that sanctification and radical dualism, as attitudes directly related to the body, would be related to experiences of the body above and beyond the more general constructs of religious commitment and intrinsic/extrinsic religiosity. This hypothesis was supported. A series of hierarchical regressions was run with the measures of religious commitment and intrinsic/extrinsic religiosity entered in the first block. Either the measure of radical dualism or the three measures of sanctification were entered in the second block, with the measures for each of the outcome variables, both body attitudes and body experiences, entered as the dependent variables. Results for regressions using the measure of radical dualism are shown in Table B4; results for regressions using the sanctification measures are shown in Table B5. Bonferroni corrections were calculated, resulting in cutoff values of p < .03 for body attitudes and p < .01 for body experiences.

Over and above the more general religious constructs, radical dualism predicted body satisfaction, as measured by the Body Appreciation Scale ( $\Delta R^2$  = .04, p = .01). ). Dualism also significantly predicted body shame, as measured by the Objectified Body Consciousness-Shame subscale ( $\Delta R^2$  = .04, p < .01). ). Dualism furthermore predicted lack of body awareness as measured by the Body Experience Questionnaire – Alienation subscale ( $\Delta R^2$  = .06, p < .01). Dualism also significantly predicted both depersonalization ( $\Delta R^2$  = .02, p = .02) and sexuality awareness ( $\Delta R^2$  = .02, p < .05), though not according to the strict Bonferroni cutoff.

Sanctification, as measured by the Christian Teachings on the Body Scale, significantly predicted body satisfaction, as measured by the Body Appreciation Scale ( $\Delta R^2$  = .03, p = .01) over and above religious commitment and intrinsic/extrinsic religiosity. Sanctification did not significantly predict body shame over and above general religiosity. Sanctification significantly predicted depersonalization ( $\Delta R^2$  = .04 p < .05) and lack of bodily awareness as measured by the Body Experience Questionnaire- Alienation subscale ( $\Delta R^2$  = .04, p < .05) and the Body Experience Questionnaire- Harmony subscale ( $\Delta R^2$  = .04, p < .05); however, none of these regressions were significant according to the strict Bonferroni cutoff value.

In order to further explore the relationship between sanctification and intrinsic religiosity, a series of Pearson correlations was run between each of the three sanctification measures and the measure of intrinsic religiosity. Bonferroni corrections were calculated, resulting in a cutoff value of p < .02. Results are shown in Table B6. Intrinsic religiosity was significantly correlated with the Sacred Qualities of the Body Scale (r = .38, p < .001), the Manifestation of God in the Body Scale (r = .42, p < .001), and the Christian Teachings on the Body Scale (r = .58, p < .001).

Given the pattern of results noted in previous analyses, in which the Christian Teachings on the Body Scale had stronger relationships with the outcome variables than did the other two sanctification measures, additional regressions were run to determine whether specific religious beliefs about the body would predict the outcome variables more than more general religious beliefs about the body. Religious commitment and intrinsic/extrinsic religiosity were entered into the first step, with the Sacred Qualities of the Body Scale and the Manifestation of God in the Body Scale entered into the second step and the Christian Teachings on the Body Scale and the Dualism Scale entered into the third step. Each measure of either body attitudes or body experiences was entered as the dependent variable. Results are shown in Table B7. Bonferroni

corrections were calculated, resulting in cutoff values of p < .03 for body attitudes and p < .01 for body experiences.

For body attitudes, both radical dualism and the Christian teachings scale significantly predicted body satisfaction as measured by the Body Appreciation Scale, above and beyond the two other sanctification scales and the more general religiosity scales ( $\Delta R^2$  = .05, p < .01). Likewise, radical dualism and the Christian teachings scale predicted body shame as measured by the Objectified Body Consciousness Shame subscale ( $\Delta R^2$  = .05, p < .01). For body experiences, radical dualism and the Christian teachings scale both predicted internal body awareness as measured by the Body Experience Questionnaire – Alienation subscale ( $\Delta R^2$  = .07, p < .001) and depersonalization ( $\Delta R^2$  = .05, p < .01). Radical dualism and the Christian teachings scale did not significantly predict sexuality awareness above and beyond the two other measures of sanctification and the more general religious variables.

## Discussion

This study explored the relationships between religiously-influenced beliefs about the body and people's attitudes toward and experiences of their bodies. While some previous studies have examined the effects of religious beliefs on attitudes toward the body (Boyatzis, Baranik, Pietrocarlo, Walsh, &

Zuluaga, 2003; Boyatzis et al., 2007; Mahoney et al., 2005), this study is one of the first to examine specific ways in which people experience their bodies in relation to their religious beliefs (Jacobson et al., 2013). In particular, this study looked at radical dualism and sanctification in relation to two body attitudes (body satisfaction and body shame) and three body experiences (depersonalization, sexual awareness, and internal body awareness). Additionally, while most studies in this area have tended to focus on women's attitudes toward their bodies (Boyatzis et al., 2007; Boyatzis et al., 2006), this study included men as a way of further understanding how a broader range of people think about and experience their bodies.

As expected in the first hypothesis, radical dualism was negatively correlated with the attitude of body satisfaction and positively related to body shame. Radical dualism was positively correlated with the experiences of depersonalization and lack of internal body awareness. Viewing one's body as a separate part of oneself was thus linked to both negative body attitudes and negative experiences of the body. This study represents the first to examine links between radical dualism and attitudes or experiences of the body (Jacobson, 2011). It may be that people who view their bodies as a burden or as a separate part of oneself also disconnect themselves from their bodily sensations as a way

of further distancing themselves from their bodies. Viewing one's body as a burden or as corrupt and sinful might result in pushing away or neglecting one's bodily sensations.

In the second hypothesis, sanctification predicted the attitude of body satisfaction and the experience of internal body awareness. Attributing both theistic and non-theistic sacred qualities to one's body was therefore linked to more positive evaluations and experiences of one's body. This supports previous research with college students which demonstrated links between sanctification and body satisfaction (Jacobson et al., 2013; Mahoney et al., 2005) and expands these findings to participants who represent a wide range of ages. Along with body satisfaction, both theistic and non-theistic sanctification were related to body awareness. It may be that people who sanctify their bodies are more likely to pay attention to their body sensations, as a way of honoring and valuing their bodies.

The third hypothesis examined whether or not the religious attitudes of sanctification and radical dualism predicted the outcome measures above and beyond religious commitment and intrinsic/extrinsic religiosity. For body attitudes, radical dualism significantly predicted both body satisfaction, body shame, and lack of internal awareness over and above more general religious

constructs. While previous literature has examined how sanctification predicts body attitudes (Jacobson et al., 2013; Mahoney et al., 2005), no research to date has examined how radical dualism is related to body attitudes and experiences. Consistent with previous research (Jacobson et al., 2013; Mahoney et al., 2005), sanctification predicted body satisfaction over and above the more general construct of religious commitment. This study extends existing research in this area by including the proximal measures of both explicitly Christian sanctification and radical dualism that directly assess specific, religious beliefs in relation to the body. Both proximal measures predicted outcome variables over and above general religiosity. This underscores Mahoney et al.'s (1999) assertion that studying specific theological beliefs highlights how general religiosity relates to the construct studied, in this case embodiment. It further emphasizes the extent to which nuanced religious beliefs play into people's attitudes about and experiences of their bodies and suggests a need for more research exploring these relationships.

Sanctification did not predict any of the other body attitudes or body experiences above general religiosity. It may be that in the present study, including intrinsic and extrinsic religiosity along with religious commitment affected the results. Sanctification and intrinsic religiosity appear to be closely

related, as evidenced by the high positive correlations between the measures of intrinsic religiosity and all three measures of sanctification.

Significantly, above the measures of general religiosity and general sanctification, radical dualism and the measure of Christian teachings about the body predicted body attitudes and body experiences, namely body satisfaction, body shame, internal awareness, and depersonalization,. These findings build on the work of Mahoney et al. (1999) and Kim (2006, 2007), highlighting the importance of examining proximal concepts of religiosity in relation to attitudes and experiences of the body. They also suggest a potential for future intervention studies aimed at targeting people's specific, nuanced religious beliefs about their bodies, in addition to more generally religious interventions.

There are several limitations to this study. First, the sample was composed predominantly of well educated, European American participants. In order to assure that these findings are consistent across race, ethnicity, and other diversity domains, this study would need to be replicated using other samples. Similarly, these participants were recruited using a snowball sample, which limits the generalizability of the data. A second limitation of this study is that the correlational nature of many of the hypotheses does not allow causal inferences to be drawn. It is possible that in addition to religious views of the

body influencing a person's attitudes and experience of the body, the reverse may also be true. It may be that people who feel more connected to and aware of their bodies will consequently hold a more sanctified view of their bodies or that people who experience disconnection from them will also hold more radically dualistic views about their bodies.

Consistent with the limitations of the present study, future research could explore the relationship between religious attitudes and experiences of the body among a wider variety of samples. The present study builds on the existing research by including men, but men continue to be an understudied group in the area of body attitudes and experience and more research would be beneficial. Future longitudinal research could explore links between religiously-influenced attitudes and body attitudes and experiences, particularly looking at how these relationships develop over time. Qualitative research would also be helpful in exploring links between ways in which people view their bodies and the ways they experience them. It would be especially beneficial to conduct qualitative and longitudinal research to look at the effect of age on how religious attitudes impact how people experience their bodies.

In conclusion, this study contributes to the existing literature regarding religious beliefs and body attitudes and expands on it by adding in the outcome

measures of body experiences. Additionally, this study looked at a wide range of ages and included men as well as women, giving a fuller perspective on how people in general relate to their bodies. It represents one of the first studies to explicitly explore proximal, rather than distal religious views of the body in relation to attitudes and experiences. Both radical dualism and sanctification appear to have important implications for the ways in which people think about and interact with their bodies. Following in the footsteps of previous research, this study continues to further elucidate the links that exist between these constructs.

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Table B1

Means and Standard Deviations for Dualism, Sanctification, and All Outcome Measures

Measure	M	SD
Dualism Scale	3.10	.97
Sacred Qualities of the Body Scale	4.54	1.12
Manifestation of God in the Body Scale	5.79	.99
Christian Teachings on the Body Scale	6.12	.80
Religious Commitment Inventory	4.21	.72
Body Appreciation Scale	3.78	.55
Objectified Body Consciousness Scale-Shame	3.50	1.04
Cambridge Depersonalization Scale	.35	.31
Body Experience Questionnaire- Alienation subscale	1.56	.55
Body Experience Questionnaire- Harmony subscale	3.11	.55
Sexual Monitoring Subscale	2.27	.51

Table B2

Intercorrelations Between Dualism and Body Attitude Measures

Measure	1	2	3	4	5	6	7
1. DS	_	_	_	_	_	_	_
2. BAS	25*	_	_	_	_	_	_
3. OBCS-SHM	.26*	63*	_	_	_	_	_
4. DEP.19*	19*	.16*	_	_	_	_	
5. BEQ-ALN	.30*	53*	.44*	.44*	_	_	_
6. BEQ-HRM	10	.40*	17*	19*	19*	_	
7. SEXMON	17*	.29*	18*	15*	30*	.15*	

Note. DS = Dualism Scale; BAS = Body Appreciation Scale; OBCS-SHM = Objectified Body Consciousness- Shame Subscale; DEP = Cambridge Depersonalization Scale; BEQ-ALN = Body Experience Questionnaire-Alienation; BEQ-HRM = Body Experience Questionnaire- Harmony; SEXMON = Sexual Monitoring Subscale, \*p < .03.

Table B3

Sanctification as a Predictor of all Body Attitude and Body Experience Measures

Variable	β	р	$\Delta R^2$	F	р
Body Appreciation Scale					
Step 1			.11	9.77	.00
SQ	.05	.51			
MGBS	06	.45			
XNTB	.35	.000			
Objectified Body Conscious	ness- Shame				
Step 1			.04	3.23	.02
SQ	.06	.47			
MGBS	.02	.82			
XNTB	23	.01			
Depersonalization					
Step 1			.07	5.79	.00
Sanctification	.14	.07			
MGBS	11	.24			
XNTB	23	.01			
Body Experience- Alienatio	n				
Step 1			.11	9.19	.00
SQ	01	.86			
MGBS	07	.43			
XNTB	28	.002			
Body Experience- Harmony	1				
Step 1			.11	8.84	.00
SQ	11	.14			
MGBS	.01	.96			
XNTB	.37	.000			

*Note.* SQ = Sacred Qualities of the Body; MGBS = Manifestation of God in the Body; XNTB = Christian Teachings on the Body.

Table B3 (continued)

Sanctification as a Predictor of all Body Attitude and Body Experience Measures

	, ,		J		
Variable	β	p	$\Delta R^2$	F	p
Sexual Monitoring Subscale					
Step 1			.03	2.31	.07
Sanctification	08	.30			
MGBS	.02	.85			
XNTB	.19	.04			

*Note.* SQ = Sacred Qualities of the Body; MGBS = Manifestation of God in the Body; XNTB = Christian Teachings on the Body.

Table B4

Dualism Predicting Body Attitude and Experience Measures Beyond Religious Commitment and Intrinsic/Extrinsic Religiosity

Variable	β	p	$\Delta R^2$	F	p
Body Appreciation Scale					
Step 1			.09	7.98	.00
RelCom	.18	.07			
INT	.11	.25			
EXT	09	.17			
Step 2			.04	10.48	.01
RelCom	.14	.16			
INT	.12	.20			
EXT	07	.30			
Dualism	20	.001			
Objectified Body Consciousn	iess- Shame				
Step 1			.07	5.86	.00
RelCom	27	.01			
INT	.11	.27			
EXT	.14	.03			
Step 2			.04	11.52	.00
RelCom	23	.02			
INT	.10	.32			
EXT	.12	.07			
Dualism	.21	.00			

*Note.* RelCom = Religious Commitment Inventory; INT = Intrinsic/Extrinsic-Intrinsic; EXT = Intrinsic/Extrinsic-Extrinsic.

Table B4 (continued)

Dualism Predicting Body Attitude and Experience Measures Beyond Religious Commitment and Intrinsic/Extrinsic Religiosity

Variable	β	p	$\Delta R^2$	F	p
Depersonalization					
Step 1			.04	3.02	.03
RelCom	07	.51			
INT	10	.33			
EXT	.09	.19			
Step 2			.02	5.73	.02
RelCom	04	.72			
INT	11	.29			
EXT	.07	.29			
Dualism	.16	.02			
Body Experience Question	nnaire- Aliena	tion			
Step 1			.10	7.90	.00
RelCom	07	.51			
INT	19	.07			
EXT	16	.02			
Step 2			.06	16.36	.00
RelCom	02	.86			
INT	20	.04			
EXT	.13	.05			
Dualism	.26	.00			

*Note.* RelCom = Religious Commitment Inventory; INT = Intrinsic/Extrinsic-Intrinsic; EXT = Intrinsic/Extrinsic-Extrinsic.

Table B4 (continued)

Dualism Predicting Body Attitude and Body Experience Measures Beyond Religious Commitment and Intrinsic/Extrinsic Religiosity

Variable	β	p	$\Delta R^2$	F	р
Body Experience Question	nnaire- Harmo	пу			
Step 1			.10	7.73	.00
RelCom	.22	.03			
INT	.10	.33			
EXT	04	.54			
Step 2			.00	0.62	.43
RelCom	.21	.05			
INT	.10	.32			
EXT	04	.60			
Dualism	05	.43			
Sexual Monitoring Subs	cale				
Step 1			.04	3.20	.02
RelCom	.09	.42			
INT	.06	.58			
EXT	13	.06			
Step 2			.02	4.17	.04
RelCom	.06	.58			
INT	.07	.52			
EXT	11	.10			
Dualism	14	.04			

*Note.* RelCom = Religious Commitment Inventory; INT = Intrinsic/Extrinsic-Intrinsic; EXT = Intrinsic/Extrinsic-Extrinsic.

Table B5
Sanctification Predicting Body Attitude and Body Experience Measures Beyond
Religious Commitment

Variable	β	p	$\Delta R^2$	F	p
Body Appreciation Scale					
Step 1			.09	7.98	.00
RelCom	.18	.07			
INT	.11	.25			
EXT	09	.17			
Step 2			.03	7.04	.01
RelCom	.18	.14			
INT	.05	.08			
EXT	08	.62			
SQ	.18	.01			
MGBS	05	.56			
XNTB	.24	.02			
Objectified Body Conscious	ıess- Shame				
Step 1			.07	5.86	.00
RelCom	27	.01			
INT	.11	.27			
EXT	.14	.03			
Step 2			.00	0.76	.39
RelCom	27	.01			
INT	.13	.20			
EXT	.14	.03			
SQ	06	.39			
MGBS	01	.92			
XNTB	13	.19			

*Note.* RelCom = Religious Commitment Inventory; INT = Intrinsic/Extrinsic-Intrinsic; EXT = Intrinsic/Extrinsic-Extrinsic; SQ = Sacred Qualities of the Body; MGBS = Manifestation of God in the Body; XNTB = Christian Teachings on the Body.

Table B5 (continued)

Sanctification Predicting Body Attitude and Body Experience Measures Beyond Religious Commitment and Intrinsic/Extrinsic Religiosity

Variable	β	p	$\Delta R^2$	F	p
Depersonalization					
Step 1			.04	3.02	.03
RelCom	07	.51			
INT	10	.33			
EXT	.09	.19			
Step 2			.04	3.27	.02
RelCom	01	.91			
INT	04	.73			
EXT	.08	.24			
SQ	.14	.07			
MGBS	12	.17			
XNTB	18	.09			
Body Experience Questic	nnaire- Aliena	tion			
Step 1			.10	7.90	.00
RelCom	07	.51			
INT	19	.07			
EXT	.16	.02			
Step 2			.04	3.55	.02
RelCom	02	.84			
INT	09	.40			
EXT	.14	.03			
SQ	02	.84			
MGBS	10	.25			
XNTB	16	.12			

*Note.* RelCom = Religious Commitment Inventory; INT = Intrinsic/Extrinsic-Intrinsic; EXT = Intrinsic/Extrinsic-Extrinsic; SQ = Sacred Qualities of the Body; MGBS = Manifestation of God in the Body; XNTB = Christian Teachings on the Body.

Table B5 (continued)

Sanctification Predicting Body Attitude and Body Experience Measures Beyond Religious Commitment and Intrinsic/Extrinsic Religiosity

Variable	β	p	$\Delta R^2$	F	p
Body Experience Quest	ionnaire- Harmo	пу			
Step 1			.10	7.73	.00
RelCom	.22	.03			
INT	.10	.33			
EXT	04	.54			
Step 2			.04	2.91	.04
RelCom	.16	.12			
INT	.03	.80			
EXT	02	.81			
SQ	10	.18			
MGBS	.01	.90			
XNTB	.25	.02			
Sexual Monitoring Sul	scale				
Step 1			.04	3.20	.02
RelCom	.09	.42			
INT	.06	.58			
EXT	13	.06			
Step 2			.01	0.68	.57
RelCom	.06	.59			
INT	.03	.76			
EXT	12	.08			
SQ	08	.32			
MGBS	.05	.63			
XNTB	.09	.40			

*Note.* RelCom = Religious Commitment Inventory; INT = Intrinsic/Extrinsic-Intrinsic; EXT = Intrinsic/Extrinsic-Extrinsic; SQ = Sacred Qualities of the Body; MGBS = Manifestation of God in the Body; XNTB = Christian Teachings on the Body.

Table B6

Intercorrelations Between Intrinsic Religiosity and Sanctification Measures

Measure	1	2	3	4	
1. INT	_	_	_	_	
2. SQ	.38*	_	_	_	
3. MGBS	.42*	.55*	_	_	
4. XNTB	.58*	.59*	.73*	_	

*Note.* INT = Intrinsic/Extrinsic Scale – Intrinsic Subscale; SQ = Sacred Qualities; MGBS = Manifestation of God in the Body; XNTB = Christian Teachings on the Body, \*p < .02.

Radical Dualism and Christian Teachings of the Body as Predictors of all Body Attitude and Body Experience Measures Above and Beyond General Religiosity, Sacred Qualities of the Body and Manifestation of God in the Body

Variable	β	p	$\Delta R^2$	F	p
Body Appreciation Scale					
Step 1			.09	7.98	.000
RelCom	.18	.07			
INT	.11	.25			
EXT	09	.17			
Step 2			.02	2.02	.13
RelCom	.17	.08			
INT	.07	.51			
EXT	09	.16			
SQ	.10	.18			
MGBS	.06	.44			
Step 3			.05	7.52	.001
RelCom	.11	.30			
INT	.03	.74			
EXT	05	.47			
SQ	.06	.43			
MGBS	01	.87			
XNTB	.20	.05			
DS	19	.003			

*Note.* RelCom = Religious Commitment Inventory; INT = Intrinsic/Extrinsic-Intrinsic; EXT = Intrinsic/Extrinsic- Extrinsic; SQ = Sacred Qualities of the Body; MGBS = Manifestation of God in the Body; XNTB = Christian Teachings on the Body.

Table B7 (continued)

Variable	β	р	$\Delta R^2$	F	p
Objectified Body Conscion	usness- Shame				
Step 1			.07	5.86	.001
RelCom	27	.01			
INT	.11	.27			
EXT	.14	.03			
Step 2			.003	.44	.65
RelCom	27	.01			
INT	.13	.22			
EXT	.15	.03			
SQ	.02	.84			
MGBS	07	.36			
Step 3			.05	6.33	.002
RelCom	21	.04			
INT	.13	.19			
EXT	.11	.09			
SQ	.04	.60			
MGBS	05	.57			
XNTB	08	.41			
DS	.21	.001			

*Note.* RelCom = Religious Commitment Inventory; INT = Intrinsic/Extrinsic-Intrinsic; EXT = Intrinsic/Extrinsic- Extrinsic; SQ = Sacred Qualities of the Body; MGBS = Manifestation of God in the Body; XNTB = Christian Teachings on the Body.

Table B7 (continued)

Variable	β	р	$\Delta R^2$	F	p
Depersonalization					
Step 1			.04	3.02	.03
RelCom	07	.51			
INT	10	.33			
EXT	.09	.19			
Step 2			.03	3.45	.03
RelCom	04	.70			
INT	07	.48			
EXT	.10	.13			
SQ	.11	.14			
MGBS	20	.01			
Step 3			.04	4.33	.01
RelCom	.02	.89			
INT	05	.62			
EXT	.07	.32			
SQ	.14	.07			
MGBS	15	.09			
XNTB	14	.19			
DS	.16	.02			

*Note.* RelCom = Religious Commitment Inventory; INT = Intrinsic/Extrinsic-Intrinsic; EXT = Intrinsic/Extrinsic- Extrinsic; SQ = Sacred Qualities of the Body; MGBS = Manifestation of God in the Body; XNTB = Christian Teachings on the Body.

Table B7 (continued)

Variable	β	р	$\Delta R^2$	F	p
Body Experience- Alienati	ion				
Step 1			.10	7.90	.000
RelCom	07	.51			
INT	19	.07			
EXT	.16	.02			
Step 2			.03	4.05	.02
RelCom	05	.64			
INT	12	.24			
EXT	.16	.01			
SQ	04	.57			
MGBS	18	.02			
Step 3			.07	9.69	.000
RelCom	.02	.82			
INT	11	.26			
EXT	.12	.06			
SQ	01	.84			
MGBS	15	.08			
XNTB	10	.32			
DS	.26	.000			

*Note.* RelCom = Religious Commitment Inventory; INT = Intrinsic/Extrinsic-Intrinsic; EXT = Intrinsic/Extrinsic- Extrinsic; SQ = Sacred Qualities of the Body; MGBS = Manifestation of God in the Body; XNTB = Christian Teachings on the Body.

Table B7 (continued)

Variable	β	p	$\Delta R^2$	F	p
Body Experience- Harmony	1				
Step 1			.10	7.73	.000
RelCom	.22	.03			
INT	.10	.33			
EXT	04	.54			
Step 2			.01	1.30	.27
RelCom	.20	.05			
INT	.08	.45			
EXT	.01	.47			
SQ	06	.42			
MGBS	.12	.11			
Step 3			.03	3.12	.04
RelCom	.15	.14			
INT	.03	.77			
EXT	01	.84			
SQ	10	.18			
MGBS	.02	.84			
XNTB	.25	.02			
DS	04	.59			

*Note.* RelCom = Religious Commitment Inventory; INT = Intrinsic/Extrinsic-Intrinsic; EXT = Intrinsic/Extrinsic- Extrinsic; SQ = Sacred Qualities of the Body; MGBS = Manifestation of God in the Body; XNTB = Christian Teachings on the Body.

Table B7 (continued)

Variable	β	p	$\Delta R^2$	F	р
Sexual Monitoring Subsca	le				
Step 1			.04	3.20	.02
RelCom	.09	.42			
INT	.06	.58			
EXT	13	.06			
Step 2			.01	.66	.52
RelCom	.07	.49			
INT	.05	.63			
EXT	13	.05			
SQ	06	.41			
MGBS	.09	.28			
Step 3			.02	2.40	.09
RelCom	.04	.74			
INT	.05	.67			
EXT	11	.11			
SQ	08	.32			
MGBS	.07	.45			
XNTB	.06	.59			
DS	14	.05			

*Note.* RelCom = Religious Commitment Inventory; INT = Intrinsic/Extrinsic-Intrinsic; EXT = Intrinsic/Extrinsic- Extrinsic; SQ = Sacred Qualities of the Body; MGBS = Manifestation of God in the Body; XNTB = Christian Teachings on the Body.

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