

What can my body do vs. how does it look?

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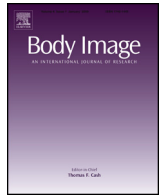
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What can my body do vs. how does it look?: A qualitative analysis of young women and men's descriptions of their body functionality or physical appearance

Jessica M. Alleva^{a,*}, Kristina Holmqvist Gattario^b, Carolien Martijn^a, Carolina Lunde^b

^a Department of Clinical Psychological Science, Maastricht University, Maastricht, The Netherlands

^b Department of Psychology, University of Gothenburg, Gothenburg, Sweden

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ABSTRACT

The aim of this study was to explore the themes that emerge when individuals are asked to describe their body functionality, and those that emerge when individuals are asked to describe their physical appearance. Data were gathered from undergraduate women and men's ($N = 75$, $M_{\text{age}} = 20.66$) responses to a writing exercise (Alleva et al., 2014), wherein they were either asked to describe their body functionality or their physical appearance. Through thematic analysis, six themes were identified from participants' descriptions of their body functionality (ordered by frequency): (a) evaluating the functionality of the body, (b) positive body-self connection, (c) resilient body, (d) comparisons to the norm, (e) body behind the scenes, and (f) enjoyment of body functions. Five themes were identified from participants' descriptions of their physical appearance (ordered by frequency): (a) comparisons to the norm, (b) evaluating the appearance of the body – own evaluations, (c) evaluating the appearance of the body – other people's evaluations, (d) the body project, and (e) appearance appreciation. Overall, the findings suggest that the themes that emerge when people are asked to reflect on their body functionality tend to be more positive, as they can be linked to positive embodiment, gratitude, and less self-objectification.

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1. Introduction

Body functionality concerns everything that the body is able to do, including functions related to physical capacities (e.g., walking), internal processes (e.g., digestion), bodily senses and sensations (e.g., sight), creative endeavours (e.g., singing), communication with others (e.g., via body language), and self-care (e.g., sleeping; Alleva, Martijn, Van Breukelen, Jansen, & Karos, 2015). Researching body functionality is important for achieving a more complete understanding of body image, which comprises not only individuals' attitudes toward their physical appearance (the focus of the majority of research to date), but also their attitudes toward their physical functioning (Tylka & Wood-Barcalow, 2015). In the present study, we investigated young women and men's descriptions of their body functionality or physical appearance, as a means to better understand the concept of body functionality, the differences that emerge when individuals are asked to reflect on their body

functionality vs. physical appearance, and how these differences may relate to changes in body image.

1.1. The relations between body functionality, positive body image, and embodiment

Research suggests that body functionality is important to experiencing positive body image and embodiment. Qualitative studies have shown that girls and boys (Frisén & Holmqvist, 2010) and women (McHugh, Coppola, & Sabiston, 2014; Wood-Barcalow, Tylka, & Augustus-Horvath, 2010) with a positive body image appreciate the functionality of their body. For instance, Aboriginal women in Canada have expressed appreciation for the ability of their body to dance, as a means to experience a connection to their culture (McHugh et al., 2014). Swedish adolescents described experiencing joy during physical activity, and conceptualised physical activity as a means of caring for their body (Frisén & Holmqvist, 2010). Further, via interviews with Canadian girls and women across the lifespan, Piran (2016) identified positive experiences of body functionality (e.g., joyful physical activity, being attuned with and adaptively responding to bodily needs) as a key component of positive embodiment. Appreciating the functionality of the body

* Corresponding author at: Department of Clinical Psychological Science, Maastricht University, P.O. Box 616, 6200 MD Maastricht, The Netherlands.

E-mail address: Jessica.Alleva@maastrichtuniversity.nl (J.M. Alleva).

was also described as a means to counteract or resist cultural pressures for girls and women to view their body as an aesthetic object, or as deficient (Fredrickson & Roberts, 1997).

Scholars have also experimentally tested whether focusing on one's body functionality can cause improvements in body image. In the first experiments in this area (Alleva, Martijn, Jansen, & Nederkoorn, 2014), undergraduate women and men (Study 1) and 30–50 year-old women (Study 2) completed an online writing exercise wherein they described their body functionality, physical appearance, or a control topic. The undergraduate men and 30–50 year-old women who described their body functionality experienced increased body satisfaction. No improvements were found among the undergraduate women who described their body functionality. However, the undergraduate women who described their physical appearance experienced decreased body satisfaction.

In another experiment, Alleva et al. (2015) developed *Expand Your Horizon*, comprising three online writing exercises distributed across one week. Each writing exercise concerned two different domains of body functionality (e.g., physical capacities, creative endeavours); participants described the functions that their body can perform with regard to these domains, and why they are personally meaningful. In this experiment, 18–30 year-old women with a negative body image completed *Expand Your Horizon* or an active control programme. Those who completed *Expand Your Horizon* experienced increased body satisfaction and body appreciation, and decreased self-objectification, at posttest and one-week follow-up. These findings have been replicated in the U.K. among 18–30 year-old women (Alleva, Diedrichs, Halliwell, Martijn et al., 2018) and women with rheumatoid arthritis (Alleva, Diedrichs, Halliwell, Peters et al., 2018), where effects persisted at one-month follow-up.

Other scholars have experimentally tested the impact of focusing on one's body functionality, as well. Mulgrew, Stalley, and Tiggemann (2017) randomised 18–35 year-old Australian women to an online task wherein they wrote 10 positive statements about their body functionality or physical appearance, and how these contribute to their well-being (e.g., "Cycling is great for my fitness and a convenient mode of transport," or, "I like styling my hair so I feel pretty when I go out with friends;" p. 128). All women – regardless of whether they described their body functionality or physical appearance – experienced increased body satisfaction after completing the task. In another experiment, Dunaev, Markey, and Brochu (2018) had 18–25 year-old U.S. women complete an online writing exercise concerning body-focused gratitude or a control topic. In the gratitude exercise, participants described three things that they are grateful for relating to their body, and were told that "this can be anything, including your health, physical appearance, or the functionality of your body" (p. 11; health was conceptualised as distinct from body functionality). Participants who completed the gratitude exercise experienced higher levels of body satisfaction at posttest. Interestingly, the effects did not depend on whether participants emphasised physical appearance, health, or body functionality. These experiments support the research by Alleva and colleagues showing that focusing on body functionality can cause improvements in body image. In contrast to Alleva et al. (2014), these studies also show that focusing on one's physical appearance can be beneficial, too (e.g., when gratitude or positive characteristics are emphasised) – a notion that this study will explore further.

1.2. Explaining the relations between body functionality, positive body image, and embodiment

Different theories have been applied to explain why focusing on body functionality would improve body image. Alleva and colleagues' experiments (2014, 2015) were inspired by *objectifi-*

cation theory (Fredrickson & Roberts, 1997), which proposes that women are socialised to evaluate their body based on its physical appearance. This encourages them to primarily view their bodies from an observer's perspective, reducing their attunement to their body's internal states and capabilities (i.e., body functionality). This tendency is referred to as *self-objectification*, and has been theorised to contribute to mental health risks for women, such as negative body image and disordered eating. A wealth of research has supported this theory, and some evidence supports its application among men, as well (see Moradi & Huang, 2008, for a review). Alleva and colleagues reasoned that focusing on one's body functionality could help to counteract the tendency to engage in self-objectification. Indeed, focusing on body functionality has reduced self-objectification in women with a negative body image (Alleva et al., 2015). Also in support of objectification theory, Alleva et al. (2014) found that the undergraduate women who described their physical appearance experienced decreased body satisfaction.

Mulgrew and colleagues (2017) described how *body conceptualisation theory* (Franzoi, 1995) could explain the benefits of focusing on body functionality. According to Franzoi, individuals can experience their body as the *body-as-object*, emphasising the aesthetic aspects of their body, or as the *body-as-process*, emphasising the functions of their body. Franzoi has shown that people's attitudes towards their body-as-process are more positive than towards their body-as-object. Similar to objectification theory, body conceptualisation theory would propose that focusing on body functionality could encourage individuals to adopt the more beneficial, body-as-process perspective. Mulgrew and colleagues found partial support for this theory, as both positive reflections of body functionality and physical appearance led to increased body satisfaction. They reasoned that encouraging *positive* reflections of one's physical appearance could encourage an "internally-driven, adaptive reflection on appearance" (p. 127).

Focusing on body functionality could also encourage individuals to realise the reasons that they have to be grateful for their body (Alleva et al., 2015; Dunaev et al., 2018), thereby shifting the focus from one's self-perceived deficits towards one's assets and the aspects that may otherwise be taken for granted (Seligman, Steen, Park, & Peterson, 2005). According to the *amplification model of gratitude* (Watkins, 2014), practicing gratitude allows individuals to identify these assets and bring them into focus. Concerning body image specifically, Homan and Tylka (2018) developed the *gratitude model of body appreciation*, whereby gratitude was found to contribute to body appreciation, in part by reducing the extent to which individuals invest their self-worth in appearance, depend on others' approval, or make appearance-based social comparisons. Supporting these theories, Dunaev et al. (2018) found that body-focused gratitude led to improved body image. Similarly, Alleva and colleagues (e.g., Alleva, Diedrichs, Halliwell, Martijn et al., 2018) found that focusing on why one's body functions are personally meaningful also led to improved body image.

Concerning embodiment more broadly, the *developmental theory of embodiment* (Piran, 2002, 2015, 2016, 2017; Piran & Teall, 2012) could also explain the positive effects of focusing on body functionality. According to this theory, experiences of functionality and agency, positive connection with the body, and enhanced attunement and responsiveness are all components of positive embodiment. Engaging in activities that enhance these components is considered to contribute to positive embodiment. For example, yoga has been conceptualised as an embodying activity and has been shown to improve body image (e.g., Neumark-Sztainer, MacLehose, Watts, Pacanowski, & Eisenberg, 2018). In the experiments described (Alleva, Diedrichs, Halliwell, Martijn et al., 2018; Alleva, Diedrichs, Halliwell, Peters et al., 2018; Alleva et al., 2014, 2015; Dunaev et al., 2018; Mulgrew et al., 2017), participants were asked to reflect on their body functionality, rather than

engage in embodying activities. Yet, these reflections contributed to improved body image. Merely *reflecting* on the activities that one's body is capable of, seems to be beneficial.

1.3. The present research

Body functionality is an important component of positive body image and embodiment, and focusing on one's body functionality is a promising technique for improving body image. Emphasising one's physical appearance seems to be less beneficial to body image (e.g., Alleva et al., 2014; Moradi & Huang, 2008), but some research suggests that appearance-focused reflections can be beneficial when they emphasise positive aspects and gratitude (Dunaev et al., 2018; Mulgrew et al., 2017). To better understand the associations between focusing on one's body functionality or physical appearance, and improvements in body image, it is important to examine how people relate to their body depending on whether they reflect on its functionality or physical appearance. To the best of our knowledge, no prior research has investigated this before; only the effects of focusing on body functionality or physical appearance have been explored. The answers to these questions could provide not only a better understanding of the different aspects of body image, but also valuable information on what aspects to focus on within interventions. Taking this into account, the aim of this research was to explore the themes that emerge when individuals are asked to describe their body functionality, and those that emerge when individuals are asked to describe their physical appearance.

2. Method

2.1. Participants

Data were derived from Alleva and colleagues' research described above (2014; Study 1), wherein 118 undergraduate women and men completed a writing exercise about their body functionality ($n=37$), physical appearance ($n=39$), or a control topic ($n=42$; Alleva et al. reported the quantitative data, but the qualitative data have not been analysed until now). The data from participants in the control group were excluded as they were not relevant to the present analyses. The remaining data were derived from 75 participants (36 women, 39 men) between 18 and 25 years old ($M=20.66$, $SD=1.61$), with body mass indices (BMI) between 16.98 and 35.14 ($M=22.13$, $SD=3.04$).¹ Most participants identified as having a Dutch ($n=35$), German ($n=29$), or other European ($n=11$) background; the remaining participants identified as Mixed ($n=5$), Asian ($n=2$), and North ($n=2$) or South ($n=2$) American.

2.2. Materials

Participants who completed the *functionality writing exercise* received these instructions:

This is a writing assignment. I would like you to describe **what your body can do**. In your writing, I would like you to take your time, really let go and explore the different things your body can do. For example, you might want to tie your answer to physical activity and movement (e.g., walking, stretching), to health (e.g., healing, digesting), to daily functions (e.g., eating, sleeping), or even to your body's relationship with other people (e.g.,

hugging, holding hands). Different bodies can do many different things, so there are no right or wrong answers. Your answer will be unique depending on your body. All of your answers will be completely confidential and anonymous. Don't worry about spelling, sentence structure, or grammar. The only rule is that you **write at least 100 words**.

Participants who completed the *appearance writing exercise* received these instructions:

This is a writing assignment. I would like you to describe **what your body looks like**. In your writing, I would like you to take your time, really let go and explore the appearance of your body. For example, you might want to tie your answer to body shape and weight (e.g., height, bone structure), to facial features (e.g., eyebrows, hair texture), to body parts (e.g., arms, hands), or even to your body's other markings (e.g., birthmarks, piercings). Different bodies look differently, so there are no right or wrong answers. [continuing as above].

For the instructions of the control writing exercise, and the questionnaires administered in the original research, see Alleva et al. (2014).

2.3. Procedure

The original research (Alleva et al., 2014), including the use of the qualitative data for the present purposes, was approved by the ethics committee of Maastricht University. In the original study, participants were recruited via flyers for a study about "life satisfaction." The study took place online. Participants provided consent and completed the Pretest questionnaires. One week later, participants were randomised to complete the functionality, appearance, or control writing exercise. Afterward, they completed the Posttest questionnaires and demographic items. One week later, participants completed the Follow-Up questionnaires, and were asked to guess the purpose of the study (no participants guessed the true purpose of the study). Participants were debriefed via email. They received a €10 voucher and were entered into a raffle to win an iPod. The present study reports only on the qualitative data collected via the writing exercises (for the quantitative data collected via the questionnaires, see Alleva et al., 2014).

2.4. Qualitative analyses

In the present research, participants' written responses to the functionality and appearance writing exercises were analysed following a thematic approach. Thematic analysis is used to identify, analyse, and report patterns, or *themes*, within qualitative data; it is considered a flexible and useful research tool that can provide a rich, detailed, and complex account of qualitative data (Braun & Clarke, 2006). Thematic analysis was chosen for the present research because we wanted to derive themes anchored in narratives.

We followed the steps of qualitative analysis by Braun and Clarke (2006). First, we (the first, second, and last authors) independently read participants' responses to the writing exercises to familiarise ourselves with their content. Upon additional readings, we each made notes concerning interesting features of the data and gave these initial codes. Second, we met to discuss the initial codes that arose from our independent readings of the data, and created a set of initial themes. Third, we independently read the data again, to see whether the initial themes worked in relation to them and whether any additional themes emerged. Fourth, we met to create a final set of themes, whereby some of the themes were combined or subthemes were created.

¹ One additional participant had completed the appearance writing exercise. At the time of the study, the research system had not correctly saved her written response, so she had emailed it to the research team. Unfortunately, at the time of the present research, we could no longer locate her written response.

The first author coded the entire dataset according to this set of themes. The third author coded a random subset of one-third of the data ($n = 13$ participants per group), and interrater agreement was calculated. Upon inspecting the initial ratings, we collapsed some of the themes and removed some of the themes that were deemed not noteworthy enough in comparison to the others. After rearranging the themes, we discussed any disagreements within themes where $\kappa < .70$ (two themes). Final inter-rater agreement was $\kappa = .87$ (range = .71–1.00).

3. Results

Below we present the six themes from participants' responses to the functionality writing exercise, followed by the five themes from participants' responses to the appearance writing exercises (Table 1 provides a summary and additional exemplary quotes).

3.1. Themes from participants' responses to the functionality writing exercise

3.1.1. Evaluating the functionality of the body

The most common theme from participants' responses to the functionality writing exercise concerned evaluating the functionality of one's body, expressed by 86% (16 women, 16 men) of the participants in this group. The participants described the abilities of their body in evaluative terms, and these descriptions concerned their overall body functionality, specific domains of body functionality (e.g., physical capacities), or specific body functions (e.g., wound healing). These evaluations were predominantly positive (56%; 9 women, 9 men). For example, one woman expressed, "In terms of health, I think my body is in a pretty pristine state. Cuts and other wounds on my body tend to heal pretty quick, and a period of the flu doesn't last over 2–3 days with me" (Participant 53). One man wrote, "My body can do anything within its physical capacities that my mind asks it to do, whether consciously or unconsciously" (Participant 67). However, some participants (44%; 6 women, 8 men) included negative evaluations *along with* their positive ones. One woman wrote, "My condition sucks. I can't run long distance," but also, "My body is very flexible ever since I was little" (Participant 103). No participant expressed only negative evaluations.

3.1.2. Positive body-self connection

The majority (62%; 13 women, 10 men) of participants described the ways in which their body and self are positively connected. Participants described mutual communications between the body and self, such as, "I try to listen to it as much as possible, meaning that if I notice my body is struggling with something (e.g., fatigue, fever, etc.), I usually try to take it easy for a while (e.g., steady and sufficient sleeping patterns, no drinking of alcohol, etc.)" (Participant 53, man), and, "My body can give me feelings of pain and pleasure, and thereby tells me what I should do and what I should not do" (Participant 31, man).

Positive body-self connection was also expressed in terms of why body functionality, specific domains of body functionality, or specific body functions are personally meaningful. One woman wrote, "I could not imagine not being able to kiss and hug my boyfriend or be lovely to my cat. [...] It helps me reaching my goals in life" (Participant 101). Similarly, one man described, "My body is the container of my mind and spirit. Thus, it functions as a connection to the physical world" (Participant 77). Positive body-self connection was also expressed in participants' descriptions of how their body expresses or represents the self, as a whole (e.g., "My body is me. I cannot separate it. It is the way I look, the way other people see me, and the way I see myself;" Participant 22, woman) or in terms of features of the self (e.g., "My body is able to do a lot

of dance movements, especially on the hip movements, because I used to be a Latin dancer;" Participant 55, woman).

3.1.3. Resilient body

Many participants (38%; 7 women, 7 men) described the ways in which their body is resilient. For instance, participants described how their body is able to function (well) despite potentially unhealthy experiences or behaviours. One man expressed that his body could "go for a full day without too much food" (Participant 117). Other participants described how their body was able to manage or adapt to changes in internal (e.g., viruses) or external (e.g., temperature) factors, or to changes in behaviour (e.g., physical activity), such as, "It is flexible. It is able to go through all different kind of states, from high arousal to complete drowsiness and the strong desire to rest. [...] My body can cope with injuries. Bones can break and grow back together. Scratches appear and disappear, same with bruises" (Participant 44, woman). Many descriptions expressed the sentiment that the body can be relied upon or is able to endure (e.g., "My body is capable of many things! [...] Reacting calmly and ridiculously quickly in the face of adverse situations;" Participant 67, man).

3.1.4. Comparisons to the norm

Eleven participants (30%; 6 women, 5 men) described their overall body functionality, specific domains of body functionality, or specific body functions in relation to 'the norm.' These comparisons were sometimes explicit, for example, "My body can do a lot of things like most people" (Participant 71, woman). In other cases, these comparisons were implicit, whereby a norm was implied, such as "I can meet the normal daily activities, like walking, eating, sleeping, et cetera" (Participant 89, woman).

In terms of the valence of these comparisons, three participants (one woman, two men) made favourable comparisons (e.g., "I am one of the fastest players on my football team;" Participant 93, man), and three participants (one woman, two men) made unfavourable comparisons (e.g., "My body is healthy although I experience a lot of problems with it for my young age;" Participant 43, woman). The remaining stated that their body functionality was neither better nor worse than the norm (one woman, one man), or combined such statements with either favourable (two women) or unfavourable (one woman) comparisons (e.g., "My body can do pretty much anything another body can do as well [...] I think my body is, for a female's body, relatively strong;" Participant 52, woman).

3.1.5. Body behind the scenes

Several participants (27%; 4 women, 6 men) described the functions that their body performs that they are not necessarily (always) aware of. These functions were described in terms of maintaining functioning for survival (e.g., "My body also regulates everything I need to live. It lets me breathe, pumps my blood round;" Participant 22, woman), or in terms of the body responding to or processing stimuli (e.g., "Sometimes I cannot control it, such as when I hear something funny and the body reacts to that without the actions passing through my consciousness;" Participant 47, man). These descriptions reflected that the body has a 'life of its own' (e.g., "There are a lot of processes your body does without your knowledge;" Participant 145, man) and is constantly functioning (e.g., "It has to perform an incalculable number of tasks twenty-four hours a day, seven days a week;" Participant 67, man).

3.1.6. Enjoyment of body functions

Seven participants (5 women, 2 men) described specific domains of body functionality or specific body functions that they like, or from which they derive positive feelings such as pleasure, enjoyment, satisfaction, or relaxation. To demonstrate, one woman

Table 1
Summary of the themes emerging from the qualitative analyses of women and men's descriptions of their body functionality or physical appearance.

Nr.	Theme	Description	Exemplary quotes
<i>Themes emerging from the functionality writing exercise</i>			
1.	Evaluating the functionality of the body	The participants described the abilities of their body in evaluative terms. These descriptions concerned either their overall body functionality, specific domains of body functionality (e.g., physical capacities, internal processes), or specific body functions (e.g., running, wound healing).	"My body can run, swim, jump, stretch, fight, lift weights, play sports, perfect eyesight, good coordination, analytical thinking, do math, science, fast learning, fast adaptation to environment and anything that I can think of!!" (Participant 41)
2.	Positive body-self connection	The participants described the ways in which their body and self are connected. This was expressed in how the body communicates to the self (e.g., stomach pains signal hunger), or vice versa (e.g., excitement creates flutters in the stomach), or how participants respond to their body's signals (e.g., taking rest when fatigued). Positive body-self connection was also expressed in participants' descriptions of why their body functionality, specific domains of body functionality, or specific body functions are personally meaningful. Participants also described how the body expresses or represents the self, either as a whole or in terms of certain features of the self (e.g., one's hobbies).	"When I get stressed, my body shows this to me very obviously. I get aches in my stomach." (Participant 66) "My body also allows me to do my favourite sports, such as soccer." (Participant 109) "I think my body represents myself and is connected with me as a person." (Participant 21)
3.	Resilient body	The participants described the ways in which their body is resilient, such as being able to function (well) despite unhealthy experiences or behaviours, and managing or adapting to changes in internal factors (e.g., viruses), external factors (e.g., temperature), or changes in behaviour (e.g., physical activity). These descriptions also expressed the sentiment that body can be relied upon or endures.	"It functions incredibly, even when I've only slept 4 hours." (Participant 101) "When I stumble my body falls but it can also get back up again" (Participant 16)
4.	Comparisons to the norm	The participants described their overall body functionality, specific domains of body functionality, or specific body functions in relation to 'the norm.' These comparisons were explicit (e.g., "I am healthy for my age") or implicit, whereby a norm was implied (e.g., "My energy level is normal").	"I consider my body being more flexible than most people and I am very proud of it." (Participant 66) "My body can do a lot of things like most people." (Participant 71)
5.	Body behind the scenes	The participants described the functions that their body performs that they are not necessarily consciously aware of. These functions were described in terms of maintaining proper functioning for survival, or in terms of the body responding to or processing stimuli.	"My body regulates its own homeostasis, hormone system, and other inner processes." (Participant 7)
6.	Enjoyment of body functions	The participants described specific domains of body functionality or specific body functions that they like, or from which they derive positive feelings (e.g., pleasure, enjoyment, satisfaction, relaxation).	"I like to hug a person when I see them and they're good friends of mine." (Participant 103)
<i>Themes emerging from the appearance writing exercise</i>			
1.	Comparisons to the norm	The participants described their appearance or aspects of their appearance (e.g., height, weight) in relation to 'the norm.' These comparisons were explicit (e.g., "I look young for my age") or implicit, whereby an appearance norm was implied (e.g., "I have normal sized breasts").	"I would say my body is one of a typical girl." (Participant 63) "I am reasonably tall with 1.90 metres." (Participant 49)
2.	Evaluating the appearance of the body: (a) Own evaluations	(a) The participants described their appearance or aspects of their appearance in evaluative terms.	"My neck is short and too thick. I don't like my body structure. My legs are too short and thick and my upper body is not waisted. My stomach is not in a nice form." (Participant 34)
	(b) Other people's evaluations	(b) The participants described what other people have said about their own appearance or aspects of their own appearance.	"People have said I have small ears [. . .] My music teachers once said I have piano fingers, because my fingers are slender." (Participant 72)
3.	The body project	The participants described their body in terms of being a 'project' that can be worked on. The participants described behaviours that they carry out to maintain, manage, manipulate, or 'enhance' their appearance or aspects of their appearance. These descriptions demonstrated high or low levels of investment in one's appearance, or the distinctions between 'natural' and 'manicured' beauty. The participants described a desire to change or control their appearance or aspects of their appearance, or to look differently than they currently look. The participants described the advantages and/or disadvantages that their appearance or aspects of their appearance afford them concerning other people or society at large.	"I don't usually leave the house without wearing make-up [. . .] When I'm putting on makeup I put the main focus on my eyes because I think they are one of my best features." (Participant 26) "My hips, they became a little bit wider since I went studying in 2006. I would like to be a little smaller in my hips." (Participant 87) "I like the appearance of my body though I am aware that some more training would be beneficial. Not to satisfy myself but rather to make use of the advantages that a trained and sporty appearance still brings in our current society." (Participant 36)

Table 1 (Continued)

Nr.	Theme	Description	Exemplary quotes
4.	Appearance appreciation	<p>The participants describe appreciation for their appearance or aspects of their appearance.</p> <p>The participants expressed acceptance of their appearance as is – despite any self-perceived flaws or regardless of whether their appearance adheres to beauty ideals.</p> <p>The participants described aspects of their appearance that make them unique, or they described remarkable features of their appearance.</p> <p>The participants also described how their appearance or aspects of their appearance reflect a connection to others (e.g., family members, members of their ethnic group, humanity at large).</p>	<p>“Surely, I have some complexes. Sometimes I wish that I would more fit in the average body ideal. However, I try to convince myself that it is nicer not to fit within it, and be happy with what I’ve got.” (Participant 40).</p> <p>“My special attribute are the freckles which I only have in my face.” (Participant 28)</p> <p>“My face looks just like my dad’s.” (Participant 26)</p>

Note. Themes are organised according to how commonly they occurred in the data, from most to least common.

wrote, “I enjoy going to fence training every Thursday as well as practicing yoga” (Participant 66). One man wrote, “I feel very good when I hug people or hold hands with my girlfriend. I love physical behaviour with my girlfriend and others” (Participant 93).

3.2. Themes from participants’ responses to the appearance writing exercise

3.2.1. Comparisons to the norm

The majority of the participants who completed the appearance writing exercise (68%; 11 women, 15 men) described their appearance or aspects of their appearance in relation to ‘the norm.’ Similar to the comparisons from the functionality writing exercises, appearance comparisons could be explicit (e.g., “I am a little taller than the average woman, being 1.72 m;” Participant 34, woman) or implicit, whereby a norm was implied (e.g., “With 6’6” I am quite tall;” Participant 114, man).

Concerning the valence of these comparisons, the majority (92%; 10 women, 14 men) were neutral (e.g., “My body I would say is one of a typical girl;” Participant 63, woman) – with many references to being ‘normal’ (e.g., “I think my body can be described as normal;” Participant 106, man) – or ambiguous, where it was unclear whether the described characteristics were perceived as negative or positive (e.g., “My body is female, it seems to look still quite young and not according to its age;” Participant 30, woman). However, two participants (both men) combined unfavourable comparisons with either positive or neutral comparisons (“Probably ‘normal’ people would not call me fat, but as a cyclist I am far from being lean. Given that this is the first thing that comes to mind when thinking about describing my body, one could say that this is something that really bothers me [...] I am not very tall, but not too short either;” Participant 127, man).

3.2.2. Evaluating the appearance of the body

Another common theme from participants’ responses to the appearance writing exercise concerned evaluating the appearance of one’s body (89%, $n = 34$). Within this theme, the majority of participants (65%; 11 women, 11 men) described their own evaluations of their appearance. Unlike the evaluations emerging from the functionality writing exercises, participants also described *other people’s* evaluations of their appearance (35%; 4 women, 8 men).

With regard to own evaluations, participants described their appearance or aspects of their appearance in evaluative terms. Seventeen participants (45% of total sample; 10 women, 7 men) included both positive and negative evaluations, such as, “I have a broad build. I like that. [...] I have a big round head; I would have liked a slimmer head” (Participant 130, man). Five participants (one woman, four men) made only negative evaluations, such as, “I have a lot of fat tissue on my chest, stomach, and upper leg. So I got

some kind of love handles and, ashamed to say, it looks like I have breasts” (Participant 72, man). None of the participants used only positive evaluations.

Concerning others’ evaluations, participants described what other people have said about their own appearance or aspects of their appearance. For the most part (three women, six men), these comments were ambiguous, for example, “Regarding my face, I seem to sometimes look sad when I am just in a relaxed state, but have strong facial expressions as far as my friends say” (Participant 70, man), and, “I am quite skinny, like for my age I look very young, sometimes people tell me I look like I would be 18–21 years old” (Participant 102, man). Two participants (one woman, one man) described positive evaluations by others (e.g., “My legs are quite muscular; women sometimes mention that they find I have nice legs and calves. Always nice to hear;” Participant 127, man); one participant (male) described a negative evaluation by others (“I have been told that my fingers look like sausages, they end rather stumpy;” Participant 49, man).

3.2.3. The body project

Just over half of the participants (55%; 11 women, 10 men) described their body in terms of being a ‘project’ that can be worked on, with both women and men largely focusing on weight, muscularity/leanness, and grooming. Specifically, participants described behaviours that they carry out to maintain, manage, manipulate, or enhance their appearance (e.g., “I do some exercising to increase my muscles in my arms and get a better shape in it;” Participant 125, man). The descriptions reflected either higher (e.g., “I don’t usually leave the house without wearing makeup;” Participant 26, woman) or lower (e.g., “My hair might look different every day as I do not style it in any way;” Participant 36, man) levels of investment in one’s appearance. Participants also distinguished between having ‘natural’ or ‘manicured’ beauty (e.g., “The eyebrows are dyed dark and plucked so that they have a nice shape [...] The hair colour is naturally blonde;” Participant 30, woman).

Participants described a desire to change or control their appearance, or to look differently than they currently do. For example, one woman expressed, “My body has curves. Some of them make it nicer, some make me want to lose some weight [...] My nose is huge and shaped like an ugly potato. If there was one thing I could change about my appearance that would be it” (Participant 50). One man wrote, “I have too much fat around my waist, but I am currently working on that [...] I would like my muscles to be more visible, but losing weight might help with that” (Participant 130). Participants also wrote about the advantages or disadvantages that their appearance afforded them concerning other people or society. One man wrote, “I like the appearance of my body, though I am aware that some more training would be beneficial. Not to satisfy myself but rather to make use of the advantages that a trained and

sporty appearance still brings in our current society” (Participant 36).

3.2.4. Appearance appreciation

Many participants (39%), mostly men (5 women, 10 men), described appreciation for their appearance or aspects of their appearance. Participants expressed acceptance of their appearance – *as is* – regardless of any self-perceived flaws or whether their appearance adheres to societal appearance ideals (e.g., “This is probably very expressive for my general attitude towards my body. Just accepting it the way it is, not trying to perfect it;” Participant 36, man). Participants also described aspects of their appearance that made them unique, or that were remarkable. For example, one man wrote, “I do have quite soft hands, for being male, with some hairs on all of my knuckles that I didn’t observe on other people so far. I find that pretty cool” (Participant 36). One woman described, “I also have freckles that I like. They are a part of me and that’s how people recognise me” (Participant 125). For some participants, appreciating their body was expressed in how their appearance reflected a connection to others, such as their family members, ethnic group, or humanity at large. One woman wrote, “I have two big birth marks on it and one of them my sisters also have, which makes me appreciate them (the marks, of course) more” (Participant 50).

4. Discussion

This study explored the themes that emerge when individuals are asked to describe their body functionality or their physical appearance. Overall, the results demonstrate that each focus generated qualitatively distinct thoughts about the body. The themes from the functionality writing exercise emphasised positive evaluations about the body, how the body and self are positively connected, and how the body is important to daily activities and enjoying life. The themes also emphasised the resilience of the body and appreciating the work that it performs ‘behind the scenes.’ Similar to the themes from functionality writing exercise, the themes from the appearance writing exercise emphasised evaluations of the body. Yet, the themes from the appearance writing exercise reflected predominantly mixed evaluations and also included *others’* evaluations of the body. Further, the themes from the appearance writing exercise emphasised the body as a ‘project’ that should be worked on. Appearance appreciation also emerged as a theme, however, and emphasised accepting the body *as is* and noticing how physical features can represent a connection to others. Comparing one’s body (appearance/functionality) to a social norm was a salient theme from both reflections on body functionality and physical appearance. However, comparison was a more predominant theme among responses to the appearance writing exercise, with many references to being ‘normal.’ The findings may shed light on why focusing on body functionality, in particular, has been shown to promote positive body image (Alleva, Diedrichs, Halliwell, Martijn et al., 2018; Alleva, Diedrichs, Halliwell, Peters et al., 2018; Alleva et al., 2014, 2015; Alleva, Veldhuis, & Martijn, 2016).

Two of the themes that emerged from describing one’s physical appearance reflect self-objectification, as articulated by *objectification theory* (Fredrickson & Roberts, 1997). A central component of self-objectification is that the individual internalises an observer’s perspective of the body and views the body as an aesthetic object, subject to others’ desires and gaze. In the present study, only those assigned to the appearance writing exercise mentioned other people’s evaluations of their body and described their body in terms of a project to be worked on, both of which may be indicative of taking an observer’s perspective toward the body. Within the framework of the *developmental theory of embodiment* (Piran, 2002, 2015, 2016, 2017, Piran & Teall, 2012), reflecting upon one’s body

based (solely) on its physical appearance, and viewing the body as a deficient site, may encourage ‘disrupted embodiment,’ in which the body is viewed as disconnected from the self. The individuals who were asked to describe their body functionality instead reflected upon their body in ways that could move them toward a more positive, connected embodiment. Several individuals described a positive body-self connection, emphasising mutual communication between the body and the self, and being attuned with bodily signals. Further, individuals expressed why their body is personally meaningful, acknowledging how their body is essential in their daily and valued activities, and for their relationships. They also described the ways in which they derived enjoyment from their body functions, reflecting the beneficial role of joyful physical activities in fostering positive embodiment. These themes also support the developmental theory of embodiment, whereby positive experiences of body functionality, positive body-self connection, and attunement to bodily needs and cues are key to fostering and maintaining positive embodiment, as well as to resisting cultural pressures to view one’s body as a deficient and objectified site (Piran, 2002, 2015, 2016, 2017, Piran & Teall, 2012).

Several of the themes that emerged from the functionality writing exercise can also be interpreted within the *gratitude model of body appreciation* (Homan & Tylka, 2018). In line with this model, focusing on the functionality of one’s body could encourage individuals to realise the reasons that they have to be grateful for their body (Alleva et al., 2015; Dunaev et al., 2018), thereby shifting the focus from one’s self-perceived deficits towards one’s assets and the things that may otherwise be taken for granted (Seligman et al., 2005). Indeed, a number of statements reflecting gratitude toward the body were identified in the themes that emerged from the functionality writing exercise. This was most evident in The Resilient Body theme, where participants described how their body is able to function (well) despite potentially unhealthy experiences or behaviours. Participants in the functionality group also expressed gratitude toward the body in that they thought of how their body was essential for their engagement in joyful activities (e.g., physical activity, hugging, dancing). Finally, they expressed gratitude toward the body in acknowledging the many functions that it performs that they are not necessarily (always) aware of, as illustrated in the theme The Body Behind the Scenes.

Expressions of gratitude were less common among the appearance group. Only one of the themes, Appearance Appreciation, can be interpreted as expressing gratitude. Within this theme, individuals expressed gratitude toward their physical appearance in the sense of body acceptance, but also in the sense that they described aspects of their physical appearance that made them unique and that reflected connection to a family member, ethnic group, or to humanity as a whole. These characteristics reflect some of the adaptive ways that individuals with a positive body image conceptualise their physical appearance (e.g., McHugh et al., 2014; Tylka & Wood-Barcalow, 2015). The present findings indicate that gratitude toward the body may be more easily elicited by focusing on body functionality, although focusing on physical appearance may also generate gratitude. Speculatively, these findings may explain why Dunaev et al. (2018) found that the positive effects of engaging in a body-focused gratitude writing exercise did not depend on whether the participants chose to write about their physical appearance or body functionality/health. Similarly, although the participants in Mulgrew and colleagues’ (2017) study were merely asked to write positive statements about their body functionality or physical appearance (i.e., gratitude was not explicitly mentioned), they were instructed to also describe how these characteristics contribute to their well-being. Having participants draw a positive connection between their physical appearance and well-being may have elicited gratitude, and thus could also explain the benefits of these reflections.

Our interpretation that the themes that emerged from the functionality writing exercises were more positive compared to those that emerged from the appearance writing exercises would support the *body-conceptualisation theory* (Franzoi, 1995), which proposes that individuals hold more positive attitudes toward their body-as-process compared to their body-as-object. Yet, the findings also highlight that eliciting thoughts about physical appearance does not necessarily trigger (only) negative thoughts, but may elicit thoughts relating to gratitude or satisfaction in some cases. It should be noted, however, that the appearance group tended to make social comparisons to cultural appearance norms, and social comparisons have been known to play a key role in promoting a negative body image (Myers & Crowther, 2009). Relatedly, it is also important to note that the functionality group frequently made evaluations about their bodily functions. Although these usually concerned positive evaluations, a 'functional body' seemed to be associated with notions of normativity and physical ability. Interestingly, in a post-hoc re-reading of the data, we also identified three instances among the functionality group where the body was described as a 'project' (two women, one man), and these descriptions concerned enhancing muscle tone, changing body weight, and getting in "better shape" (Participant 119, woman). This shows that descriptions of body functionality could, in some cases, be infused with notions of appearance ideals. Collectively, these findings suggest that intervention effects (or lack thereof) may depend on factors such as the propensity to appreciate one's physical appearance, the tendency to make appearance-based social comparisons, or the perceptions of one's 'health,' physical functioning, and what constitutes 'normal' physical ability. It will also be important to focus participants' descriptions of body functionality on those aspects that are not reflective of appearance ideals.

Last, it is valuable to consider potential gender differences regarding the themes that emerged from women and men's responses to the writing exercises. Overall, the number of women and men who expressed each theme was not strikingly different for the majority of themes. One notable difference concerns the theme Appearance Appreciation, expressed by twice as many men as women. This finding aligns with quantitative research on body appreciation showing that men tend to experience higher levels of body appreciation compared to women (Tiggemann, 2015). Scholars have theorised that this gender difference may be due to more flexible appearance ideals for men, a greater emphasis on men's body functionality compared to their physical appearance, and greater access to societal and individual resources that could enhance or maintain body appreciation (Swami, Steiger, Haubner, & Voracek, 2008; Tiggemann, 2015). The fact that many men expressed appearance appreciation could also help to explain why Alleva et al. (2014; Study 1) found that women who focused on their physical appearance – but not men – experienced decreased body satisfaction as indicated by the quantitative data. Emphasising appearance appreciation could have potentially counteracted any negative or objectifying effects of focusing on one's physical appearance.

In relation to the quantitative data (Alleva et al., 2014), it is also interesting to consider why men – but not women – who described their body functionality experienced improvements in body satisfaction. This is especially noteworthy considering that we did not identify any striking differences in the number of women and men in the functionality group who expressed each theme. In line with objectification theory (Fredrickson & Roberts, 1997), women – to a greater extent than men – are socialised to focus predominantly on their physical appearance. Having completed a single writing exercise may not have been sufficient to counteract the tendency to engage in self-objectification, and so women may need more practice to develop a functionality-based perspective toward their body. Indeed, experiments using a series of three writing exercises

have been found to lead to more positive body image in women (Alleva, Diedrichs, Halliwell, Martijn et al., 2018; Alleva, Diedrichs, Halliwell, Peters et al., 2018; Alleva et al., 2015).

4.1. Implications for interventions aiming to improve body image and embodiment

Collectively, the present findings point toward the following suggestions for interventions designed to enhance positive body image and embodiment. Based on the themes emerging from the functionality writing exercise, we propose that interventions should encourage individuals to recognise and appreciate the ways in which their body and self are positively connected. For example, participants could be asked to consider: In what ways do your body and self communicate? How might you recognise and respond to bodily signals? Why are your body functions personally meaningful, and how do they help you to express who you are? These questions could be answered within the context of writing exercises (Alleva, Diedrichs, Halliwell, Martijn et al., 2018; Alleva, Diedrichs, Halliwell, Peters et al., 2018; Alleva et al., 2015, 2016; Dunaev et al., 2018; Mulgrew et al., 2017), whereby participants reflect positively on the functions of their body in relation to meaningfulness, gratitude, and well-being. Yet, there are other ways that interventionists might draw individuals' attention to these questions. For example, yoga has been proposed to improve body image by helping participants to develop bodily awareness and responsiveness, and by connecting mind and body via physical postures that emphasise body functionality over physical appearance (Impett, Daubenmier, & Hirschman, 2006; Mahlo & Tiggemann, 2016). Other activities that have been proposed to enhance a positive body-self connection include belly dance, street dance, modern dance, life drawing, and spending time in nature (Langdon & Petracca, 2010; Swami, von Nordheim, & Barron, 2016; Swami, 2017; Tiggemann, Coutts, & Clark, 2014). We propose that any activity can potentially enhance positive body image and embodiment if approached with a positive, functionality-based mind-set, and if experienced as joyful. Indeed, enjoyment of body functionality was a key theme emerging from the qualitative data. Relatedly, prior research has investigated activities predominantly involving physical capacities (with the exception of life drawing; Swami, 2017) as tools to foster positive body image, but intervention techniques regarding body functionality should not be limited to able-bodied individuals. Activities concerning other domains of body functionality could also foster positive body-self connection, such as those emphasising creative endeavours (e.g., painting, singing) and bodily senses (e.g., cooking, listening to music). Experiments testing these notions will be valuable.

In addition to emphasising positive body-self connection and enjoyment of body functionality, the findings also suggest that interventions should encourage participants to appreciate all of the ways that their body functions for them 'behind the scenes,' how the body functions (well) despite challenges, and to make positive evaluations of their body functionality. A common link between these ideas is that it may be important to help individuals to appreciate their body for all of the functions that it is able to perform – regardless of whether one is entirely satisfied with his or her body functionality, experiences physical limitations, or is unable to perform certain functions (Alleva, Tylka, & Kroon Van Diest, 2017). Indeed, in a recent experiment, Alleva, Diedrichs, Halliwell, Peters et al. (2018) showed that focusing on body functionality can lead to improvements in body image among women with rheumatoid arthritis. The participants were encouraged to focus on their body functionality in a holistic manner (i.e., not limited to physical capacities or internal processes), and to focus on those functions that their body is able to perform *despite* experiencing symptoms. These encouraging findings suggest that it is beneficial to emphasise the

positive aspects of one's body functionality, while also accepting one's limitations.

We can also gain valuable knowledge for future interventions based on the themes that emerged from the appearance writing exercises. Namely, reflections on one's physical appearance may be beneficial when they emphasise positive aspects and gratitude. Interventions could include exercises that instruct participants to identify self-perceived positive aspects of their physical appearance, and to think of reasons why they are grateful toward their physical appearance. The writing exercises developed by [Dunaev et al. \(2018\)](#) and [Mulgrew et al. \(2017\)](#) may be useful. Some forms of mirror exposure have also trained individuals to describe the self-perceived positive aspects of their physical appearance (e.g., [Jansen et al., 2016](#)), and have been shown to improve body image. However, we would caution that intervention techniques that encourage individuals to focus on their physical appearance should be balanced with those focusing on body functionality, to not reinforce or enhance an over-emphasis on physical appearance. The present findings also suggest that it may be important to help individuals to counteract cultural norms surrounding physical appearance (e.g., seeing the body as a 'project'), and to tackle social comparison tendencies, for example via media literacy or cognitive dissonance-based activities (e.g., [Jankowski et al., 2017](#); [McLean, Paxton, & Wertheim, 2016](#)). Techniques that help individuals to emphasise their body functionality might also lead to reduced adherence to cultural appearance norms and social comparison tendencies. Future research could test these ideas experimentally.

4.2. Limitations of the present research

One limitation of this research is that participants were young adults who were recruited from an undergraduate liberal arts and sciences programme, and most of them likely considered themselves to be in 'good physical health.' This may have limited the generalisability of the findings. For example, it may be easier for individuals to experience positive feelings toward their body functionality if they have not experienced physical limitations, and if they perceive their body as being close to cultural norms of physical ability. With regard to age and education level, these participants may have had more resources (e.g., time, money, opportunity) to engage in activities that could foster functionality appreciation, such as being able to engage in joyful physical activities. The undergraduate students may have also been used to articulating their ideas in writing. Research among more diverse samples (e.g., among older adults, individuals with a physical disability or illness, individuals with other educational backgrounds) will provide additional valuable insight into how people think about their body functionality and physical appearance, and how these reflections might contribute to positive body image.

Another limitation concerns the writing exercise instructions, which provided a few examples to stimulate participants to think more deeply and to consider various aspects of their body functionality or physical appearance. Therefore, the instructions may have encouraged participants to think of their body functionality or physical appearance differently than they might have otherwise, for example if the instructions had merely stated, "describe your body functionality," or, "describe your physical appearance." It should also be noted that, although [Alleva et al. \(2014\)](#) attempted to phrase the instructions in a neutral manner, the instructions of the functionality writing exercise might have seemed more positive to participants, thus leading to more positive associations. It could be argued that the instructions, along with a general discourse of physical appearance as something 'deficient,' were not entirely equal in terms of positive tone and may have affected the responses that participants provided. On the other hand, part of the benefit of focusing on one's body functionality might be that

body functionality is inherently more positive, as bodily functions may be more closely related to notions of gratitude and individuals' values (e.g., one's hobbies, connection to family), and less heavily couched in restrictive cultural expectations. These are ideas that could be explored in future research.

Another limitation to this research is that, although our analyses of the qualitative data were not driven by specific a priori hypotheses or theoretical models, it is impossible to analyse qualitative data in an entirely objective manner. Our reading of the data will likely have been influenced by our own backgrounds, academically (e.g., our prior research has been informed by feminist psychology) and personally (e.g., as women). Our knowledge about previous research linking body functionality to positive body image could have also influenced us to search for more positively connoted themes in the functionality group. Other researchers might have derived different or additional themes from the data.

4.3. Conclusions

This study is the first to explore what individuals think about when asked to focus on their body's functionality or physical appearance. The findings indicate that focusing on one's body functionality can stimulate positive thoughts and appreciation concerning one's physical abilities and their connection to the self. The findings are also in line with different theoretical models within the field, including objectification theory ([Fredrickson & Roberts, 1997](#)), body conceptualisation theory ([Franzoi, 1995](#)), the developmental theory of embodiment ([Piran, 2002, 2015, 2016, 2017](#); [Piran & Teall, 2012](#)), and the gratitude model of body appreciation ([Homan & Tylka, 2018](#)). The theoretically-informed knowledge derived from the present research could be incorporated into interventions aiming to promote positive body image and embodiment.

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References

- Alleva, J. M., Diedrichs, P. C., Halliwell, E., Martijn, C., Stuijzand, B. G., & Treanman-Evans, G., et al. (2018). A randomised-controlled trial investigating potential underlying mechanisms of a functionality-based approach to improving women's body image. *Body Image*, 25, 85–96. <http://dx.doi.org/10.1016/j.bodyim.2018.02.009>
- Alleva, J. M., Diedrichs, P. C., Halliwell, E., Peters, M. L., Dures, E., & Stuijzand, B. G., et al. (2018). More than my RA: Improving body image in women with rheumatoid arthritis using a functionality-focused intervention programme. *Journal of Consulting and Clinical Psychology*, 86, 666–676. <http://dx.doi.org/10.1037/ccp0000317>
- Alleva, J. M., Tylka, T. L., & Kroon Van Diest, A. M. (2017). The Functionality Appreciation Scale (FAS): Development and psychometric evaluation in U.S. community women and men. *Body Image*, 23, 28–44. <http://dx.doi.org/10.1016/j.bodyim.2017.07.008>
- Alleva, J. M., Veldhuis, J., & Martijn, C. (2016). A pilot study investigating whether focusing on body functionality can protect women from the potential negative effects of viewing thin-ideal media images. *Body Image*, 17, 10–13. <http://dx.doi.org/10.1016/j.bodyim.2016.01.007>
- Alleva, J. M., Martijn, C., Jansen, A., & Nederkoorn, C. (2014). Body language: Affecting body satisfaction by describing the body in functionality terms. *Psychology of Women Quarterly*, 38, 181–196. <http://dx.doi.org/10.1177/0361684313507897>
- Alleva, J. M., Martijn, C., Van Breukelen, G. J. P., Jansen, A., & Karos, K. (2015). *Expand Your Horizon: A programme that improves body image and reduces self-objectification by training women to focus on body functionality*. *Body Image*, 15, 81–89. <http://dx.doi.org/10.1016/j.bodyim.2015.07.001>
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3, 77–101. <http://dx.doi.org/10.1191/1478088706qp063oa>

- Dunaev, J., Markey, C. H., & Brochu, P. M. (2018). An attitude of gratitude: The effects of body-focused gratitude on weight bias internalization and body image. *Body Image*, 25, 9–13. <http://dx.doi.org/10.1016/j.bodyim.2018.01.006>
- Franzoi, S. L. (1995). The body-as-object versus the body-as-process: Gender differences and gender considerations. *Sex Roles*, 33, 417–437. <http://dx.doi.org/10.1007/BF01954577>
- Fredrickson, B. L., & Roberts, T.-A. (1997). Objectification theory: Toward understanding women's lived experiences and mental health risks. *Psychology of Women Quarterly*, 21, 173–206. <http://dx.doi.org/10.1111/j.1471-6402.1997.tb00108.x>
- Frisén, A., & Holmqvist, K. (2010). What characterizes early adolescents with a positive body image? A qualitative investigation of Swedish girls and boys. *Body Image*, 7, 205–212. <http://dx.doi.org/10.1016/j.bodyim.2010.04.001>
- Homan, K. J., & Tylka, T. L. (2018). Development and exploration of the gratitude model of body appreciation in women. *Body Image*, 25, 14–22. <http://dx.doi.org/10.1016/j.bodyim.2018.01.008>
- Impett, E. A., Daubenmier, J. J., & Hirschman, A. L. (2006). Minding the body: Yoga, embodiment, and well-being. *Sexuality Research & Social Policy*, 3, 39–48. <http://dx.doi.org/10.1525/srsp.2006.3.4.39>
- Jankowski, G. S., Diedrichs, P. C., Atkinson, M. J., Fawcner, H., Gough, B., & Halliwell, E. (2017). A pilot controlled trial of a cognitive dissonance-based body dissatisfaction intervention with young British men. *Body Image*, 23, 93–102. <http://dx.doi.org/10.1016/j.bodyim.2017.08.006>
- Jansen, A., Voorwinde, V., Hoebink, Y., Rekkers, M., Martijn, C., & Mulken, S. (2016). Mirror exposure to increase body satisfaction: Should we guide the focus of attention towards positively or negatively evaluated body parts? *Journal of Behavior Therapy and Experimental Psychiatry*, 50, 90–96. <http://dx.doi.org/10.1016/j.jbtep.2015.06.002>
- Langdon, S. W., & Petracca, G. (2010). Tiny dancer: Body image and dancer identity in female modern dancers. *Body Image*, 7, 360–363. <http://dx.doi.org/10.1016/j.bodyim.2010.06.005>
- Mahlo, L., & Tiggemann, M. (2016). Yoga and positive body image: A test of the embodiment model. *Body Image*, 18, 135–142. <http://dx.doi.org/10.1016/j.bodyim.2016.06.008>
- McHugh, T. L. F., Coppola, A. M., & Sabiston, C. M. (2014). "I'm thankful for being Native and my body is part of that": The body pride experiences of young Aboriginal women in Canada. *Body Image*, 11, 318–327. <http://dx.doi.org/10.1016/j.bodyim.2014.05.004>
- McLean, S. A., Paxton, S. J., & Wertheim, E. H. (2016). Does media literacy mitigate risk for reduced body satisfaction following exposure to thin-ideal media? *Journal of Youth and Adolescence*, 45, 1678–1695. <http://dx.doi.org/10.1007/s10964-016-0440-3>
- Moradi, B., & Huang, Y.-P. (2008). Objectification theory and psychology of women: A decade of advances and future directions. *Psychology of Women Quarterly*, 32, 377–398. <http://dx.doi.org/10.1111/j.1471-6402.2008.00452.x>
- Mulgrew, K. E., Stalley, N. L., & Tiggemann, M. (2017). Positive appearance and functionality reflections can improve body satisfaction but do not protect against idealised media exposure. *Body Image*, 23, 126–134. <http://dx.doi.org/10.1016/j.bodyim.2017.09.002>
- Myers, T. A., & Crowther, J. H. (2009). Social comparison as a predictor of body dissatisfaction: A meta-analytic review. *Journal of Abnormal Psychology*, 118, 683–698. <http://dx.doi.org/10.1037/a0016763>
- Neumark-Sztainer, D., MacLehose, R. F., Watts, A. W., Pacanowski, C. R., & Eisenberg, M. E. (2018). Yoga and body image: Findings from a large population-based study of young adults. *Body Image*, 24, 69–75. <http://dx.doi.org/10.1016/j.bodyim.2017.12.003>
- Piran, N. (2002). Embodiment: A mosaic of inquiries in the area of body weight and shape preoccupation. In S. Abbey (Ed.), *Ways of knowing in and through the body: Diverse perspectives on embodiment* (pp. 211–214). Welland, ON: Soleil.
- Piran, N. (2015). New possibilities in the prevention of eating disorders: The introduction of positive body image measures. *Body Image*, 14, 146–157. <http://dx.doi.org/10.1016/j.bodyim.2015.03.008>
- Piran, N. (2016). Embodied possibilities and disruptions: The emergence of the Experience of Embodiment construct from qualitative studies with girls and women. *Body Image*, 18, 43–60. <http://dx.doi.org/10.1016/j.bodyim.2016.04.007>
- Piran, N. (2017). *Journeys of embodiment at the intersection of body and culture*. Cambridge, MA: Academic Press.
- Piran, N., & Teall, T. L. (2012). The developmental theory of embodiment. In G. McVey, M. P. Levine, N. Piran & H. B. Ferguson (Eds.), *Preventing eating-related and weight-related disorders: Collaborative research, advocacy, and policy change* (pp. 171–199). Waterloo, ON: Wilfred Laurier Press.
- Seligman, M. E. P., Steen, T. A., Park, N., & Peterson, C. (2005). Positive psychology progress: Empirical validation of interventions. *American Psychologist*, 60, 410–421. <http://dx.doi.org/10.1037/0003-066X.60.5.410>
- Swami, V. (2017). Sketching people: Prospective investigations of the impact of life drawing on body image. *Body Image*, 20, 65–73. <http://dx.doi.org/10.1016/j.bodyim.2016.12.001>
- Swami, V., Stieger, S., Haubner, T., & Voracek, M. (2008). German translation and psychometric evaluation of the Body Appreciation Scale. *Body Image*, 5, 122–127. <http://dx.doi.org/10.1016/j.bodyim.2007.10.002>
- Swami, V., von Nordheim, L., & Barron, D. (2016). Self-esteem mediates the relationship between connectedness to nature and body appreciation in women, but not men. *Body Image*, 16, 41–44. <http://dx.doi.org/10.1016/j.bodyim.2015.11.001>
- Tiggemann, M. (2015). Considerations of positive body image across various social identities and special populations. *Body Image*, 14, 168–176. <http://dx.doi.org/10.1016/j.bodyim.2015.03.002>
- Tiggemann, M., Coutts, E., & Clark, L. (2014). Belly dance as an embodying activity?: A test of the embodiment model of positive body image. *Sex Roles*, 71, 197–207. <http://dx.doi.org/10.1007/s11199-014-0408-2>
- Tylka, T. L., & Wood-Barcalow, N. L. (2015). What is and what is not positive body image? Conceptual foundations and construct definition. *Body Image*, 14, 118–129. <http://dx.doi.org/10.1016/j.bodyim.2015.04.001>
- Watkins, P. C. (2014). *Gratitude and the good life: Toward a psychology of appreciation*. New York, NY: Springer. <http://dx.doi.org/10.1007/978-94-007-7253-3>
- Wood-Barcalow, N. L., Tylka, T. L., & Augustus-Horvath, C. L. (2010). "But I like my body": Positive body image characteristics and a holistic model for young-adult women. *Body Image*, 7, 106–116. <http://dx.doi.org/10.1016/j.bodyim.2010.01.001>