

# Positive embodiment for wellbeing researchers and practitioners: A narrative review of emerging constructs, measurement tools, implications, and future directions

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**Abstract:** Positive embodiment has emerged from the eating disorder field as a psychological construct describing positive experiences of inhabiting the body. As a positive construct associated with wellbeing, new theories, models, and measures may be of interest to researchers and practitioners in the field of positive psychology. No review to date has presented the literature on positive embodiment to this audience. This interdisciplinary inquiry highlights a shared interest in the promotion of wellbeing and the building of protective resources bridging positive psychology and disordered eating prevention. A systematic literature search of six databases was performed (APA PsychINFO, Science Direct, Scopus, CINAHL, Academic Search Complete, and SportDiscus) and empirical research is presented with attention paid to wellbeing concepts and opportunities for further research. This literature search located two measurement tools that operationalize positive embodiment which are explored along with their conceptual roots and underlying theories. This review incorporates quantitative and qualitative studies, and explores concepts across identified studies. Positive embodiment offers further understanding of the role of the body in wellbeing and nuance to the interconnections of concepts frequently viewed as separate, such as eating and exercise behaviour, agency and empowerment, self-concept and body image. Implications for integration in current positive psychology interventions are discussed, along with limitations of current knowledge and future research potential. As a narrative review, the subjective nature of inquiry is acknowledged and this project humbly intends to provide a landscape perspective of an emergent topic area in order to inform future research, practice, and policy possibilities. In conclusion, while research on positive embodiment is still emerging and more research is necessary to generalize, connections to wellbeing have been found, new measurement tools provide opportunities for further study, and practitioners may gain a greater appreciation for the role of the body in wellbeing.

**Keywords:** positive embodiment; embodiment; wellbeing; positive psychology

## 1. Introduction

This review introduces the concept of *positive embodiment* to practitioners and researchers within positive psychology. Positive embodiment brings together topic areas regarding the body and has potentially impactful relationships with wellbeing. This review begins with a brief consideration of the role of the body in positive psychology, a description of embodiment, and the emergence of positive embodiment. The two published scales that have operationalized positive embodiment - the Experiences of Embodiment Scale (EES; Piran, Teall, & Counsell, 2020) and the Mindful Self-Care Scale (MSCS; Cook-Cottone & Guyker, 2018) - will be discussed in

greater detail including foundational research and theories, current research, and future opportunities. The literature on positive embodiment will be reviewed in detail with attention to implications for practice and research. While research in this area began with a focus on the prevention of disordered eating, in line with the goal of positive psychology to foster positive outcomes rather than repair dysfunction and disorder, this article focuses specifically on the bolstering of wellbeing in relation to positive embodiment.

### *1.1 Positive psychology*

Positive psychology is the study of wellbeing and positive mental states, including life-satisfaction, optimism, meaning and purpose, and happiness at individual, institutional, and societal levels (Seligman & Csikszentmihalyi, 2000). Positive psychology interventions (PPIs) are activities designed to improve wellbeing and promote mental health beyond the absence of pathology (van Agteren et al., 2021). Multiple models of wellbeing exist, including distinctions between ‘hedonic’ happiness or subjective wellbeing (Diener, 2000) and ‘eudemonia’ or psychological wellbeing (Ryff, 1989). Multiple models of wellbeing have been put forth including Keyes’ model of wellbeing as a spectrum (2007), Seligman’s model of flourishing known by the acronym PERMA - Positive emotions, Engagement, positive Relationships, Meaning, and Achievement (2011), and the newer LIFE model (Layered Integrated Framework Example) describing multiple spheres of influence on wellbeing (Lomas, Hefferon, & Ivtzan, 2015). The field of positive psychology, while influenced by earlier movements, is commonly considered to have begun with Seligman, then president of the American Psychological Association, articulating the importance of re-balancing a field focused primarily on dysfunction to include the positive (Seligman, 1998). Since its inception there have been a number of conceptual “waves” within the field. The first focused to a large degree on quantifying the positive emotions that had been neglected by scientific inquiry; the second expanding to include ‘the dark side’ and the value and importance of so-called ‘negative’ and mixed emotions and experiences in life; and the third wave, building on the previous two, aiming to expand beyond a positivist, individual focus and incorporate a deeper understanding of socio-cultural forces, systems of power, and qualitative inquiry including feminist and social-justice perspectives (Lomas et al., 2020).

### *1.2 The body in positive psychology*

Within a few years of the designation of positive psychology, critiques characterized the field as a “neck-up focused discipline” (Hefferon, 2015, p.791) that ignored the important role of the body in wellbeing. Instead of an exclusive focus on cognitive and emotional processes, a more embodied approach in positive psychology was argued for (Hefferon, 2015), exercise was advocated for as an ideal PPI (Faulkner, Hefferon, & Mutrie, 2015; Hefferon & Mutrie, 2012), and a textbook on Positive Psychology and the body was written (Hefferon, 2013). The stated aim of the textbook being highlighting copious research on physical mechanisms of wellbeing, with a focus on the body in everyday life, including how we care for, feed, move, and relate to our bodies (Hefferon, 2013, pp. ix). The threads to embodiment and conceptual underpinnings of embodied phenomenological experiences have been gathered in Hefferon’s introduction to the topic and reference Merleau-Ponty’s definitions of embodiment and subjective experiences (2013, pp. 8-9) frequently cited in embodiment research (discussed further below). The addition of the ‘V’ for Vitality to Seligman’s PERMA model of wellbeing, by some in the field, is symbolic of a greater embracement of the physical domain in positive psychology (St. Andrew’s College, n.d.; Zhivotovskaya, 2016).

There has been growing research interest in the potential of yoga as a PPI focusing on mind-

body connection and mindfulness of the body (e.g. Bansal et al., 2013; Ivtzan & Papantoniou, 2014). Additionally, *positive body image*, with its emphasis on the important role our relationship to our body plays in wellbeing, has begun to bridge the gap between embodiment research and positive psychology (e.g. Ayala, & Ramírez, 2018; Cash & Smolok, 2011; Hefferon, 2015; Tylka, 2011).

### 1.3 A brief review of the concept of embodiment

Embodiment has roots in philosophy and critical theory (Foucault, 1979; Merleau-Ponty, 1962) and has a multitude of definitions that centre on experiencing and perceiving the world from the location of the body (Tolman, Bowman, & Fahs, 2014, p. 760). Central to understanding embodiment is the rejection of Cartesian mind/body dualism for a unity that identifies the body as the centre of subjective experience in the world and does not distinguish the mind as separate from the body (Vilvoskaya, 2021). Essentially, we do not experience life as a mind alone, life is rooted in the experiences of the body and informed by the world around us, including culture and society (Crossley, 1995; Merleau-Ponty, 1962.)

In recent years, there has been growing interdisciplinary interest in embodiment (preliminary Scopus search shows an average of 43 articles/year from 1981-1990, 110/year from 1991-2000, 530/year from 2001-2010, and 1516/year from 2011-2020). Fields as divergent as cognitive neuroscience, psychotherapy, and eating disorder treatment have interest in this inquiry (e.g. Glenberg et al., 2013; Winter et al., 2018; Cook-Cottone, 2015). In psychology, several researchers have advocated for more inquiry into embodiment as an important part of understanding how individuals live in the world and in their bodies (e.g. Blood, 2004; Cash 2004; Katzman and Lee, 1997; Piran, 2001). Piran and colleagues (Piran & Teall, 2012; Piran et al., 2020) describe three components of embodiment: (a) *attunement* to inner states of the body, as opposed to body image which primarily focuses on appearance related factors; (b) being comprised of a wide range of experiences frequently looked at individually, like eating and exercise behaviours, self-expression, sexual agency, and self-care; and (c) a dialectical relationship between the body and socio-cultural influences.

### 1.4 Positive embodiment

Positive embodiment is defined as an experience of comfort and connection with the body, attuned self-care, and bodily agency and is contrasted to disrupted embodiment, experienced as discomfort, self-neglect, and restricted agency (Piran, 2016). There is some conceptual overlap with other positive body-related constructs, including body appreciation (Tylka & Wood-Barcalow, 2015), body functionality (Alleva & Tylka, 2021), and body image flexibility (Sandoz et al., 2013), but the breadth of experience encompassed by positive embodiment transcends a single area to capture a fuller concept of the way living in a body is experienced (Piran, 2020). This expanded conceptualization of positive embodiment includes partial conceptual overlap with resistance to objectification (Fredrickson & Roberts, 1997) intuitive eating (Tylka, 2003; Tylka, & Kroon Van Diest, 2013), and attuned or positive sexuality (respectively, Statinski & Ramseyer Winter, 2019; Hefferon, 2013, pp. 108-135). Positive embodiment brings together these multiple facets of inquiry and provides an overarching framework to unify constructs. Emerging research from Gattario et al. (2020) found a correlation between positive embodiment and life satisfaction pointing to potential impact of further exploring these connections (explored further in Results section). Like positive psychology, models of positive embodiment offer a framework for moving beyond preventing mental illness - in particular, the prevention of eating disorders (e.g. Cook-Cottone, 2006, 2015; Piran & Cormier, 2005) – towards the innately valuable promotion of

wellbeing.

Two multifaceted models of embodiment have been published in recent years, including the Developmental Theory of Embodiment (Piran, 2017) and the Attuned Representational Model of Self (Cook-Cottone, 2006) (See Table 1). Thus far no review has been undertaken to signpost the significance of positive embodiment to positive psychology practitioners.

**Table 1.**  
Conceptual Models of Embodiment.

Conceptual Models of Embodiment	
Attuned Representational Model of Self (ARMS Model)	Developmental Theory of Embodiment (DTE)
<p>Theoretical model of the self as a dynamic relationship between inner and outer components that are connected via the process of ‘attunement’</p> <p>Internal systems:</p> <ul style="list-style-type: none"> <li>- cognitive (thoughts);</li> <li>- emotional (feelings);</li> <li>- physical (body)</li> </ul> <p>External systems:</p> <ul style="list-style-type: none"> <li>- microsystem (family)</li> <li>- exosystem (community)</li> <li>- macrosystem (culture)</li> </ul> <p>When these components are well balanced healthy, positive embodiment occurs and allows for a well-functioning self</p> <p>(Cook-Cottone, 2006, 2015, 2018)</p>	<p>Developed from qualitative interviews with young women, older women, and a 5-year prospective study with girls (age 9-14 at initial interview)</p> <p>Utilized purposive sampling method</p> <p>Five domains identified – each containing a negative and positive pole</p> <ol style="list-style-type: none"> <li>1) body connection and comfort;</li> <li>2) agency and functionality;</li> <li>3) experience and expression of desire;</li> <li>4) engagement in attuned self-care practices;</li> <li>5) resistance to self-objectification</li> </ol> <p>The DTE organizes protective factors into three domains: the physical domain (physical freedom), the mental domain (mental freedom), and the social power domain</p> <p>(Piran, 2016, 2017; Piran et al., 2020)</p>
<p>Related Scale: Mindful Self-Care Scale (MSCS)</p> <p>(Cook-Cottone &amp; Guyker, 2018)</p>	<p>Related Scale: Experiences of Embodiment Scale (EES) (Piran, Teall, &amp; Counsell, 2020)</p>
<p>Developed from a review of literature of self-care and expert input</p> <p>Six factors emerged:</p> <ol style="list-style-type: none"> <li>1) physical care</li> <li>2) supportive relationships</li> <li>3) mindful awareness</li> <li>4) self-compassion and purpose</li> <li>5) mindful relaxation</li> <li>6) supportive structure</li> </ol>	<p>Developed from the above research project</p> <p>Six factors emerged:</p> <ol style="list-style-type: none"> <li>1) positive body connection and comfort</li> <li>2) body un-encumbered adjustment</li> <li>3) agency and functionality</li> <li>4) experience and expression of sexual desire</li> <li>5) attuned self-care</li> <li>6) resisting objectification</li> </ol>

### 1.5 The developmental theory of embodiment

The Developmental Theory of Embodiment (DTE) has emerged from over 20 years of research by Niva Piran and colleagues, and offers a framework for understanding the social and cultural experiences that inform embodied realities for women and girls (Piran, 2017; Piran & Teall, 2012). The foundational qualitative research includes a five-year prospective study with girls (age at beginning: 9-14 years), following participants through puberty and adolescence, and life history studies with both young- and older-women (Piran, 2016; 2017).

Five dimensions of experience of embodiment emerged with each representing a spectrum from positive experiences of freedom to negative experiences of being controlled: 1) body connection and comfort; 2) agency and functionality; 3) experience and expression of desire; 4) engagement in attuned self-care practices; and 5) resistance to self-objectification (Piran, 2016, 2017; Piran et al., 2020). The DTE also organizes protective factors into three domains: physical, mental, and social power domains (Piran, 2015). Building on extensive foundation qualitative research, Piran and colleagues employed various quantitative approaches (eg. Piran & Cormier, 2005; Piran, 2019) and the Experiences of Embodiment Scale was developed as the first quantitative measurement tool to capture experience of embodiment ranging from negative to positive (Piran, Teall, & Counsell, 2020).

#### 1.5.1 Experiences of embodiment scale

The Experiences of Embodiment Scale (EES) was developed using four independent samples of women (N = 92, N = 412, N = 328, and N = 76 ) and six factors emerged: 1) positive body connection and comfort; 2) body un-encumbered adjustment; 3) agency and functionality; 4) experience and expression of sexual desire; 5) attuned self-care; and 6) resisting objectification (Piran et al., 2020). Positive experiences in one domain of the EES commonly co-occurred with positive experiences the other domains indicating links between the domains, though more research is needed to understand these relationships. Scores also correlated with other measures of body connection, and self-esteem, and were stable at three-week follow-up (Piran et al., 2020). Key differences in the EES from the foundational qualitative research is the addition of the 'body un-encumbered adjustment' and less focus on eating behaviour as a dimension of the desire factor. As the EES is recently developed, only a small number of studies have so far deployed it (discussed in detail in Results); thus, ample opportunity exists for further exploration of positive embodiment as captured by the EES.

### 1.6 The attuned representational model of self

The second model for understanding embodiment and the ongoing negotiation of the self is the Attuned Representational Model of Self (ARMS), created by Catherine Cook-Cottone (2006, 2015). The ARMS conceptualises the self as a dynamic relationship between inner and outer components connected via the process of *attunement*, a reciprocal relationship of mutual impact and regulation (Cook-Cottone, 2015; Siegal, 2007). Internal systems consist of cognitive (thoughts), emotional (feelings), and physical (body) components, and external systems consist of microsystem (family), exosystem (community), and macrosystem (culture). When components are in sync, healthy, positive embodiment occurs and allows for "effective functioning of the self ... beyond self as subject or object" (Cook-Cottone, 2015, p. 2). In discussion of the ARMS and its impact relationship with disordered eating, Cook-Cottone draws on definitions of wellbeing as a spectrum (Keyes, 2007) and of flourishing (Seligman, 2011), foundational in positive psychology, and posits that people strive beyond the relief of suffering for positive dimensions

of mental wellness. The ARMS model and accompanying discussions focus on self-regulation, intentional self-care behaviours, self-compassion and body appreciation (Cook-Cottone, 2006, 2015, 2018).

### 1.6.1 *The mindful self-care scale*

The Mindful Self-Care Scale (MSCS) was specifically created to capture behaviours that facilitate positive embodiment and wellbeing (Cook-Cottone & Guyker, 2018, p. 161). It was developed from a literature review of self-care supported by expert input and was validated with two independent samples (N=448, N=452) that included both women and men. A six-factor model emerged: 1) physical care, 2) supportive relationships, 3) mindful awareness, 4) self-compassion and purpose, 5) mindful relaxation, and 6) supportive structure. The authors utilise the definition of positive embodiment from Piran and colleagues (2015); thus, it seems that the authors intend it to be applied to the same phenomena. An important note was the intention, in the development of the MSCS, to develop actionable, practical items that could be used prescriptively after assessment; thus, each item within the MSCS has potential to function as an intervention. The MSCS has been used in a variety of settings including cross-cultural validation with a Turkish population (Sünbül, et al., 2018a); validation with hospice and health care workers and the development of a brief version of the MSCS (Hotchkiss & Cook-Cottone, 2019); the relationship between stress, self-care, and health related quality of life for students (Feng et al., 2019); and the role of self-care in mitigating stress and burnout with student service professionals (Jackson Preston et al., 2021). In studies looking at self-care practices, but not positive embodiment, scores on the MSCS were found to be strongly correlated with subjective wellbeing for Indian students and working professionals (Chatterjee & Jethwani, 2020) and with wellbeing for students in mental health fields (Sünbül, et al., 2018b). Use of the MSCS has so far focused on measuring self-care behaviours with little emphasis on its intended purpose of measuring positive embodiment; thus, plenty of opportunities remain for further exploration of this scale in regards to positive embodiment and wellbeing.

### 1.7 *Research aims*

This narrative review aims to support wellbeing researchers and practitioners in maximizing the potential of positive embodiment. An emphasis will be placed on what this emerging subject area has to offer with respect to wellbeing, including both demonstrated and anticipated benefits. Limitations of the current body of knowledge will be addressed, future opportunities for research will be identified, and implications for practice including adjustments to PPIs based on new concepts will be explored.

## **2. Method**

### 2.1 *Narrative reviews*

The goal of review studies is to provide a summary and synthesis of the literature on a specific topic and report on the current state of research. As positive embodiment is a new field of study, a systematic review with formalized guidelines was seen to be less appropriate as the small body of empirical research has taken varied approaches to operationalisation and employed different methodologies (Baumeister & Leary, 1997). A narrative review was chosen in order to provide greater flexibility in exploring the literature, within a comprehensive, transparent search and selection process (Ferrari, 2015).

To address the subjective nature of narrative review, the study design was structured and

robust in exploration of the subject and what it may offer researchers and practitioners. This review intends to serve as a stepping-off point, connecting research on positive embodiment with an audience who may not be aware of it. Extensive statistical analysis of the data that exists was not performed as aggregation of quantitative and qualitative data makes such an appraisal difficult (Dixon-Woods et al., 2001) and with a limited number of total studies, disparate research methods, and study designs, a landscape overview of the topic was deemed most appropriate. The hope is that this work piques interest for readers interested in embodiment and wellbeing, particularly those interested in further research on these concepts, or who may integrate insights into their work as practitioners.

### 2.2 Search strategies and keywords

This review aimed to locate studies operationalizing positive embodiment. A literature search was conducted utilizing six electronic databases - APA PsychINFO, Science Direct, Scopus, CINAHL, Academic Search Complete, and SportDiscus. The databases were selected to span a breadth of disciplines (including psychology, sociology, sports psychology, and nursing) and to include abstract, keyword, and full-text searching.

The initial search took place in April 2021 and was repeated in June 2021. Keywords ‘positive embodiment’ were input into the aforementioned databases. A search for papers citing the development and validation papers of the two identified scales was also performed in order to locate studies that have deployed the EES (Piran et al., 2020), and the MSCS (Cook-Cottone & Guyker, 2018).

### 2.3 Eligibility criteria and study selection

Inclusion criteria and selection process are summarized in Tables 2 and 3. All quantitative studies that operationalized positive embodiment were included. All participant samples were included. Qualitative studies that centred positive embodiment as the topic of investigation were included. Studies mentioning positive embodiment, or the DTE as explanation of phenomena, but not operationalized or a primary focus were excluded. No date limits were applied. Studies were limited to English. Only papers retrievable online (including interlibrary loan) were included. Due to retrieval issues with grey literature (dissertations), the decision was made to focus on peer-reviewed, published research.

**Table 2.**

Inclusion and Exclusion Criteria.

Inclusion	Exclusion
Empirical studies published in peer-reviewed journals	Non-empirical studies including book chapters, editorials, or reviews. Grey literature that was not retrievable.
Studies that operationalize positive embodiment (or experiences of embodiment inclusive of both positive and negative dimensions) (Quantitative studies)	Studies on body image or related constructs that made mention of positive embodiment or models of embodiment as potential explanatory mechanisms but do not investigate positive embodiment
Studies that investigate positive embodiment phenomenologically (Qualitative studies)	specifically

Initial search results were sorted manually, using Zotero, to remove duplicates. Next, titles and abstracts were reviewed to remove irrelevant papers, those that made passing reference to positive embodiment but did not address it specifically in the aims of the paper, and those containing conceptually similar subject areas (such as positive body image, body functionality, etc.) Book chapters and review papers were also removed at this stage in order to focus on novel empirical studies. Remaining papers were read in their entirety, or to the point where exclusion was determined. Eligible papers identified were read closely and data was extracted into tables (Tables 4, 5, and 6 in Results). Data extracted included research focus, participants, measures used or themes identified, and a summary of results.

**Table 3.**  
 Selection Process.

Initial search => 128 documents
Duplicates removed => 82
Screened Titles and Abstracts => 18
Read in full => 10 met inclusion criteria
Final Sample: 10 papers detailing 13 studies
2 scale development papers totaling 6 quantitative studies
6 quantitative papers detailing 5 studies
2 qualitative studies

### 3. Results

The search process yielded 10 papers including the scale development and validation papers previously discussed (Table 4). Of the remaining papers, six quantitative (Table 5) and two qualitative inquiries (Table 6) were identified. Four studies measured positive embodiment using the EES, but none of the studies deploying the MSCS focused on positive embodiment. All located studies took place in Western countries and five of ten papers focus exclusively on female participants. A mixture of student and community samples was used. Four studies used an experimental design and disparate measurement tools were deployed for many. Themes of wellbeing, self-care, yoga and physical activity, and resisting objectification were present across studies and will be explored in more detail below.

**Table 4.**  
 Development and Validation Studies.

PAPER	POPULATION	MEASURES	RESULTS
Mindful Self Care Scale  (Cook-Cottone & Guyker, 2018)	Two independent samples: 1. N=448, ages 18-71, 79.7% female, 90% Caucasian 2. N=452, ages 18-78, 69.7% female, 70.8% Caucasian	1. MSCS – 84  2. Eating attitudes Test (EAT-26; Garner et al., 1982)  3. Body Esteem Scale (BES; Franzoi & Herzon, 1986)  4. Demographic information	Items assessed for normality of distribution  Sample 1: exploratory factor analysis, construct validity

			Sample 2: confirmatory factor analysis
Experiences of Embodiment Scale  (Piran et al., 2020)	<p>4 independent samples of women</p> <ol style="list-style-type: none"> <li>1. N=92, ages 19-55, 72.5% white, majority students</li> <li>2. N=412, ages 18-45, 38.9% white, 41.8% Asian, university / community sample</li> <li>3. N=348, age 18-26; 53% Black, 47% white; university, New York</li> <li>4. N=76, age 18-45; 71.1% white, ~ half students, Toronto</li> </ol>	<p>Study 1:</p> <ol style="list-style-type: none"> <li>1. EES</li> <li>2. Body Esteem (BESAA; Mendelson et al., 2001)</li> <li>3. Body Surveillance subscale of Objectified body consciousness scale (OBC; McKinley &amp; Hyde, 1996)</li> <li>4. Alexithymia (TAS-20; Bagby et al., 1994)</li> <li>5. Eating attitudes (EAT-26; Garner et al., 1982)</li> <li>6. Self-Esteem (SES; Rosenberg, 1989)</li> <li>7. Depression (BDI; Beck et al., 1989)</li> </ol> <p>Study 2:</p> <ol style="list-style-type: none"> <li>1. EES</li> <li>2. Body Esteem (BESAA; Mendelson et al., 2001)</li> <li>3. Body Surveillance subscale of OBC (McKinley &amp; Hyde, 1996)</li> <li>4. Self-esteem (SES) (Rosenberg, 1989)</li> <li>5. Alexithymia (TAS-20, DIF subscale; Bagby et al., 1994)</li> <li>6. Body Connection (SBC; Price &amp; Thompson, 2007)</li> </ol>	<p>Study 1: Item reduction, internal consistency, convergent validity</p> <p>Study 2: Further exploration of factor structure, convergent and discriminant validity</p> <p>Study 3: Confirmatory factor analysis</p> <p>Study 4: EES scores stable at 3 weeks follow-up</p>

		<p>7. Body responsiveness (BRS; Daubenmier, 2005)</p> <p>8. Physical self-worth (subscale of PSPP; Kalmet &amp; Fouladi, 2008)</p> <p>9. Sexual assertiveness (HISA; Hurlbert 1991)</p> <p>10. Disordered eating (EDE-Q; Fairburn &amp; Beglin, 1994)</p> <p>11. Perfectionism – personal standards subscale of MPS (Frost et al., 1990)</p> <p>12. Sports competence (subscale of PSPP; Kalmet &amp; Fouladi, 2008)</p> <p>Study 3:  1. EES</p> <p>Study 4:  1. EES</p>	
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**Table 5.**  
**Quantitative Studies Investigating Positive Embodiment**

PAPER	POPULATION	MEASURES	RESULTS
Alleva, et al., (2020)	<p>Young-adult women (N = 114; M age = 22.19)</p> <p>10-week Hatha yoga programme, waitlist controlled.</p> <p>Primarily Western European participants</p> <p>Exploring yoga, functionality appreciation and facets of positive body image</p>	<p>1. Functionality Appreciation Scale (FAS; Alleva et al., 2017)</p> <p>2. Body Appreciation Scale (BAS-2; Tylka &amp; Wood-Barcalow, 2015)</p> <p>3. Body Compassion Scale (BCS; Altman et al., 2017)</p> <p>4. Multidimensional Body-Self Relations Questionnaire – Appearance evaluation subscale (Brown et al., 1990)</p>	<p>Effects on positive body image mediated by embodiment and self-objectification</p> <p>Yoga did not increase functionality appreciation</p> <p>Functionality appreciation did not mediate effects on positive body image</p> <p>Follow-up data could not be analysed due to attrition</p>

		<p>5. Self-Objectification Beliefs and Behaviours Scale (SOBBS; Lindner &amp; Tantleff-Dunn, 2017)</p> <p>6. Physical Body Experiences Questionnaire (PBE; Menzel, 2010)</p> <p>7. Demographic info, prior experience with yoga, evaluation of yoga programme</p> <p>Pretest, Mid-test, Post-test, and 1-month Follow-Up.</p>	<p>Yoga participants experienced lower self-objectification at mid-test and greater embodiment over time</p> <p>All participants (including controls) experienced improvements in body appreciation, body compassion, and appearance evaluation</p> <p>Lower self-objectification contributed to body appreciation and body compassion</p> <p>Embodiment contributed to body appreciation, body compassion, and appearance evaluation</p> <p>Main limitation – high attrition at follow-up</p>
<p>Cox, et al., (2020).</p>	<p>N=62, women 18-54 mean age 23.89 USA, 74% Caucasian, Not experienced in yoga</p> <p>Single yoga class with 3 conditions:</p> <ol style="list-style-type: none"> <li>1. Mindful approach</li> <li>2. Appearance focus</li> <li>3. Neutral instruction</li> </ol> <p>Exploring yoga instructional strategies, positive embodiment and positive affect</p>	<ol style="list-style-type: none"> <li>1. State mindfulness: body subscale from the State Mindfulness Scale for Physical Activity (SMS-PA; Cox, Ullrich-French, &amp; French, 2016)</li> <li>2. Affect before and after: The Feeling Scale (FS; Hardy &amp; Rejeski, 1989)</li> <li>3. Pleasantness of activity: visual analogue scale (like Zenko et al., 2016).</li> <li>4. Forecasted pleasure (EVS; Lishner et al., 2008)</li> </ol>	<p>Modest effect for affect, highest for mindful condition</p> <p>Significant effect for remembered pleasure – less pleasure for appearance focus than other conditions</p> <p>Significant difference in body surveillance – higher for appearance condition</p> <p>No differences for body appreciation</p>

		<ol style="list-style-type: none"> <li>5. Body appreciation post: Body Appreciation Scale-2 (Homan, 2016)</li> <li>6. Body Surveillance subscale of the Objectified Body Consciousness Scale (OBC; McKinley &amp; Hyde, 1996).</li> <li>7. Baseline variables: Short Inventory for Mindfulness Capabilities (SIM-C; Duan &amp; Li, 2016), Behavioral Regulation in Exercise Questionnaire (BREQ-3; Markland &amp; Tobin, 2004), Body Appreciation (BAS-2; Tylka &amp; Wood-Barcalow, 2015), and Body Shape Questionnaire (BSQ-R-10; Mazzeo, 1999)</li> </ol>	<p>Main limitation – small homogenous sample</p>
<p>Gattario, et al., (2020).</p>	<p>N=760; 302 Swedish women mean age 24.36; 242 Swedish men mean age 24.36; 216 Canadian women mean age 23.22</p> <p>Gender and cultural differences in embodiment and life satisfaction</p>	<ol style="list-style-type: none"> <li>1. EES (Piran et al., 2020)</li> <li>2. Body Esteem (BESAA; Mendelson et al., 2001)</li> <li>3. Thin-ideal internalization (SATAQ-3; Thompson et al., 2004)</li> <li>4. Restraint subscale of Eating Disorder Examination Questionnaire (EDE-Q; Fairburn &amp; Beglin, 1994)</li> <li>5. Satisfaction with Life Scale (SWLS; Diener et al. 1985)</li> </ol>	<p>Swedish women had more positive embodiment than Canadian women</p> <p>Swedish women had more negative experiences of embodiment than Swedish men</p> <p>Women had lower scores for Body Connection and Comfort, Body-unencumbered Adjustment, and Resisting Objectification; no gender differences for Agency and Functionality, Experience and Expression of Sexual Desire, and Attuned Self-Care.</p>

			<p>Swedish women - stronger correlation between EES and SWLS than body esteem Swedish men - no difference</p> <p>Embodiment and body esteem correlated for both genders</p> <p>For women, embodiment predicted life satisfaction</p> <p>Main limitation – variance in information collected in sample populations</p>
<p>Sundgot-Borgen, et al., (2019).</p>	<p>N=2446, adolescent Norwegian boys (43%) and girls; mean age 16.8</p> <p>Healthy body image intervention targeting positive embodiment and health-related quality of life</p> <p>Three group workshops (spaced every 3 weeks) focused on body image, media literacy, and lifestyle</p>	<ol style="list-style-type: none"> <li>1. Demographic information</li> <li>2. Experiences of Embodiment (EES)</li> <li>3. Health-related quality of life (KIDSCREEN-10; Ravens-Sievers, 2006)</li> </ol> <p>Assessed at baseline, 3-months, and 12 months post intervention</p> <p>Cluster controlled by schools</p>	<p>For boys - short-term positive effect on embodiment but was not maintained at follow-up</p> <p>For girls - significant effect on positive embodiment, maintained in follow-up and peaked at 12-months post</p> <p>Intervention had minimal effect on health-related quality of life</p> <p>Main limitation: high dropout rate especially boys and controls</p>
<p>Sundgot-Borgen, et al., (2020)</p>	<p>Mediational analysis of HBI study above</p>	<ol style="list-style-type: none"> <li>1. Experiences of embodiment scale (EES)</li> </ol>	<p>Path analysis indicated positive embodiment was increased via increased self-esteem in both genders</p>

		<ol style="list-style-type: none"> <li>2. Internalization of Body Ideals (SATAQ-4; Schaefer et al., 2015)</li> <li>3. Media literacy and social media use (unpublished scale)</li> <li>4. Self-compassion (TSCS-SF; Rae et al., 2011)</li> <li>5. Self-esteem (RSES; Rosenberg, 1965)</li> <li>6. Body image flexibility (BIAAQ; Sandoz et al., 2013)</li> </ol>	<p>Only self-esteem mediated a positive effect on PE for both girls and boys</p> <p>Transient small effect for boys, sustained effect for girls</p> <p>Main limitation: high dropout rate especially boys and controls</p>
<p>Voica et al., (2021).</p>	<p>N=410, 55.6% women, age 24, Swedish, recruited from ongoing longitudinal study</p> <p>Exploring disordered eating (DE) with positive psychology lens</p>	<ol style="list-style-type: none"> <li>1. Disordered eating (EDE-Q; Fairburn &amp; Beglin, 1994)</li> <li>2. Self-Esteem (SISE; Robins et al., 2001)</li> <li>3. Identity Coherence subscale (EPSI; Rosenthal et al., 1981)</li> <li>4. Positive Embodiment (Positive Body Connection and Comfort [PBCC]/ Agency and Functionality [AF] subscales; EES)</li> </ol>	<p>Women had higher levels of DE than men</p> <p>Men had higher self-esteem and PBCC</p> <p>No gender differences in identity coherence and AF</p> <p>For women – PBCC correlated with lower degrees of DE; self-esteem moderately correlated; AF and identity coherence were small to moderate</p> <p>For men – PBCC and self-esteem moderately correlated with lower degrees of DE; identity coherence and AF had small correlation</p> <p>Predictive variables correlated positively with each other</p>

			<p>Multiple regression analysis: Women, PBCC strongest predictor of low DE (26.8% of variance)</p> <p>Together, four variables account for 42.6% of variance in DE for women, and 23.9% for men</p> <p>Main limitation – cross sectional design does not establish direction of causality</p>
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**Table 6.**  
Qualitative Studies Investigating Positive Embodiment

PAPER	FOCUS	SAMPLE	THEMES	RESULTS
Taylor, K. A., & Russell-Mayhew, S. (2018).	How women experience and maintain positive embodiment	Constructivist grounded theory  10 women, 18-29, self-identify as experiencing positive embodiment, no history of eating disorders, Canada	<ol style="list-style-type: none"> <li>Working to balance - self-caring as pathway</li> <li>Conceptualizing self – self as unique &amp; self in relation</li> </ol>	<p>A core concept of working to balance all aspects of their lives and embodied experiences, achieved through self-caring.</p> <p>Participants emphasize “practice” and “routine” in balancing individual self and cultural/social context.</p> <p>Main limitation – small, homogenous sample</p>
Ellison, T., & Papps, F. A. (2020).	The role of embodied practice (yoga)	IPA interviews 4 women,	<ol style="list-style-type: none"> <li>Other-validated sexuality – conditioning &amp;</li> </ol>	Supports embodied practices facilitating positive

	<p>in the developing sexual potential - defined as physical, mental, emotional, and social well-being related to sexuality</p>	<p>Caucasian (Australian), ages 28 – 59, with regular embodied practice (yoga)</p>	<p>disembodiment</p> <p>2. Embodiment practice – releasing conditioning &amp; becoming embodied</p> <p>3. Self-Validated sexuality – connection to self; connection to others; &amp; connection to soul</p>	<p>embodiment (from initial position of disrupted embodiment)</p> <p>Participants reported increased feelings of connection to their bodies, sensations, internal states, a greater sense of self- expression and individuality, increased body appreciation, positive affect, confidence, and self-described mental health</p> <p>Main limitation – small, homogenous sample</p>
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### 3.1 Wellbeing

Both research teams putting forward models and scales of positive embodiment, conceptualize it as intrinsically related with wellbeing. Piran et al. describe positive experiences of embodiment as ‘embodied wellbeing’ (2020, pp.131) and the design of the MSCS includes the stated purpose of items aimed at increasing wellbeing (Cook-Cottone & Guyker, 2018), with mindful self-care considered a foundation of both physical and mental wellbeing. Across all studies, links between wellbeing and positive embodiment were made including both qualitative and quantitative perspectives.

Qualitatively, participants in both studies self-described a connection between positive embodiment and their wellbeing; with participants drawing connections between sexuality, spirituality, and wellbeing (Ellison and Papps, 2020), and the self-described protective effect of positive embodiment on mental-health and self-esteem (Taylor and Russel-Mayhew, 2018).

In correlational research, positive embodiment measures predicted a significant degree of variance in disordered eating, evidencing the benefit of a positive psychology lens in understanding and preventing disordered eating by fostering resilience, wellbeing, and self-identity (Voica et al., 2021). Positive embodiment was also correlated with higher life satisfaction, especially for women, for whom positive embodiment was a significant predictor of life satisfaction (Gattario et al., 2020). Life satisfaction, as mentioned in the introduction, is a component of hedonic happiness, or subjective wellbeing (Diener et al., 1985).

The yoga intervention studies provide insight into environments that support wellbeing and positive embodiment. The type of cuing in a single-session yoga class intervention was shown to

impact participants' affect, another component of subjective wellbeing, with the biggest affect increase from cuing mindfulness (Cox et al., 2020). This matters, authors posit, because experiencing pleasure and enjoyment while doing yoga or exercising may be a key factor in the continuation the practice which may in turn impact wellbeing further (Cox et al., 2020). The 10-week Hatha yoga intervention, which was shown to improve body image via increased embodiment and decreased self-objectification, was phrased to participants as investigating wellbeing and included themes of empowerment, acceptance, compassion, connecting, gentleness, and body diversity in the content, again highlighting contextual factors for benefitting from yoga (Alleva et al, 2020).

Sungot-Borgen and colleagues' (2019) school-based intervention, was shown to increase positive embodiment, especially for girls, and was designed in a way that focused on the wellbeing benefit of health behaviours. Authors propose that this perspective of wellness could aid in reducing comparison and negative self-talk, increase media criticality, and improve body relationships, that in turn promote psychological wellbeing. In the exploration of indirect effects (2020) researchers posit that the pathway of improving self-esteem could have a knock-on effect on psychological wellbeing which could create a positive cycle of healthier choices, positive attitudes, and positive self-talk that would continue to improve positive embodiment experiences across domains. Such connections with psychological wellbeing are discussed but not yet explored in detail, for example, correlated with measures of PWB as conceptualized by Ryff (1989).

Connections to wellbeing have been drawn across studies with a recurring theme of the possibility of an upward spiral effect.

### 3.2 *Self-care*

Self-care is considered a key to experiencing positive embodiment, evident in its centrality in the Mindful Self-Care Scale, and in the attuned self-care dimension of experiences of embodiment in the DTE (Piran, 2016; 2017) and the EES (Piran et al., 2020). Indeed, self-caring was also discovered as central in Taylor and Russell-Mayhew's qualitative inquiry into young women's maintenance of positive embodiment (2018).

Cross-sectionally, Swedish women had more positive embodiment than Canadian women on most dimensions including attuned self-care, with no differences in attuned self-care found between Swedish men and women; authors postulate greater gender equality may afford Swedish women more time for self-care than Canadian women which may affect life satisfaction (Gattario et al., 2020). While not measuring self-care behaviour directly, in exploration of a positive psychology perspective on disordered eating, connections between both Piran and Cook-Cottone's models are drawn and authors emphasize the interconnections between domains of the DTE – that increased body comfort may be related to self-care activities and attuning to body signals (Voica et al., 2021).

Sungot-Borgen and colleagues' school-based intervention (2019) promoted a self-care and functionality-based approach to lifestyle factors such as exercising, eating, and sleeping; suggesting that improving self-care behaviours could improve both health and positive embodiment and again echoing the notion of creating a positive cycle.

### 3.3 *Yoga and physical activity*

Included studies reflect growing interest in the possibility of yoga and physical activity facilitating positive embodiment with an integrative approach to mind and body. Yoga and exercise are features of both scales and models of positive embodiment. In the MSCS (Cook-

Cottone & Guyker, 2018) yoga is included with mindfulness activities and as a mind/body practice and in the physical care factor, alongside exercise. The authors highlight established connections between exercise, wellbeing, stress-management, and health promotion. Joyful and immersive physical activity is a component of the DTE and is contrasted to exercise for controlling physique (Piran, 2016). This relationship is operationalized in the EES and authors discuss how the scale offers future opportunities to explore yoga's impact on positive embodiment (Piran et al., 2020).

Two quantitative studies involved yoga interventions, and one qualitative study looked at experiences of women with regular yoga practices. In exploring effects of single-session yoga instructional strategies on positive embodiment, authors found that focus on appearance reduced affect benefit of a yoga class and suggest that the focus in yoga and exercise settings should prioritise enjoyment over appearance or weight, both for short-term benefit and likelihood of continuation (Cox et al., 2020). In a 10-week yoga intervention, improved embodiment and lower self-objectification drove improvements in body image and embodiment scores were also correlated with body appreciation, body compassion and appearance evaluation (Alleva et al., 2020). Qualitatively, Ellison & Papps (2020) explored the role of yoga practice on positive sexuality via the pathway positive embodiment and participants described how yoga fostered a positive relationship with the self that in turn fostered a more attuned relationship with their sexuality. These inquiries into yoga and positive embodiment all reflect experiences that are immersive and experiential rather than cognitive or reflection-based.

Sundgot-Borgen and colleagues' school-wide intervention (2019) which was shown to increase positive embodiment for girls, was designed to challenge prevailing attitudes that glorify extreme exercise and diets by promoting exercise, nutrition, and sleep as self-care practices, which highlights the effect attitudes towards these activities have on embodiment. In further mediational analysis, authors discuss that future iterations may include physical activity as an experiential component in the intervention itself, which could potentially result in larger effect sizes for boys (Sundgot-Borgen et al., 2020).

In cross-sectional studies, the value of yoga and attuned exercise for experiential promotion of positive embodiment is echoed with links made to its value in both treatment and prevention of eating disorders (Voica et al., 2021) and the importance of joyful physical activity as a protective factor for positive embodiment (Gattario et al., 2020).

In investigating qualitatively how young women maintain positive embodiment, researchers found both yoga and exercise were aspects of self-care with physical, mental, and social benefits; with listening and responding to internal cues emphasized, alongside the relationship between caring for the body, body acceptance, and self-acceptance (Taylor & Russel-Mayhew, 2018). Across studies, yoga and physical activity consistently emerge as important but with a specific focus that it is not just the activity itself that is key but the nature of the relationship with the activity that impacts positive embodiment; that the purpose of activity should be experiential, enjoyable, and not focused on manipulating physique.

### *3.4 Beyond appearance - resisting objectification*

All included studies include value placed on resisting objectification and moving beyond an appearance-focused valuation of the body. Resistance to objectification goes beyond body esteem and is an ongoing relationship negotiated in the context of social and cultural forces that become embodied practices (Piran, Teall, & Counsell, 2020). This includes the ways women navigate socially prescribed beauty practices such as wearing makeup, food restriction, exercise for appearance, and spending personal resources on appearance. The negative and positive

polarities of this domain are, respectively, existing in the body as an object of gaze, or subjectively experiencing the world as an agent with meaningful goals (Piran et al., 2020). The MSCS also emphasizes experiencing the body subjectively rather than objectively and connect subjectivity with attending to both inner experiences and external demands. Authors suggest that preoccupation with external objectives, may disrupt body image, and fuel burnout, disordered eating, disconnection, and substance-use; thus, self-care should be driven by positively inhabiting the body rather than appearance (Cook-Cottone & Guyker, 2018).

This theme of moving away from an appearance focus is present in both yoga intervention studies. In Cox et al.'s yoga instructional strategy exploration (2020), body surveillance seemed to undermine the positive affect benefits of yoga. In Alleva et al.'s 10-week yoga intervention (2020), researchers found reduced self-objectification at mid-test and greater scores on a measure of embodiment over time and both of these factors mediated the effect of the yoga condition on body image. The study was the first to explore connections between self-objectification, embodiment, and yoga practice, and while lower self-objectification did not predict body appreciation, it was found to predict body compassion and appearance evaluation (Alleva et al., 2020).

As previous discussed, a central feature the Healthy Body Image intervention was focusing self-care behaviours away from appearance, increasing criticality of unhealthy body ideals and fostering awareness of media use to reduce self-objectification and internalization of harmful messaging (Sungot-Borgen et al., 2019; 2020). The authors describe how such criticality is important for adolescents to counter risk of eating disorders and body image concerns (Sungot-Borgen et al., 2019). This echoes Voica et al.'s (2021) exploration of positive protective factors for disordered eating and draws attention to further exploring the role of agency, functionality, and confidence as positive factors that may aid in prevention of disordered eating and help shift focus beyond appearance and objectification.

In investigating gender and cultural differences in experiences of embodiment, Gattario et al. (2020) discuss the role of social pressure for thinness, disordered eating, and the normative nature of body dissatisfaction. Swedish women in the study scored lower on resistance to objectification than Swedish men, but higher than Canadian women, suggesting that while Swedish women may experience fewer pressures than Canadian women, they are not on par with Swedish men, prompting authors to posit that such cultural variations highlight the need for systemic change to promote and protect wellbeing by counteracting objectifying portrayals of women (Gattario et al., 2020).

The theme of moving away from objectification and appearance was also apparent in qualitative studies. As the title 'Sexuality without that mirror' suggests (Ellison & Papps, 2020), participants describe moving beyond objectified sexuality and attractiveness towards more embodied experiences, an experience participants connected with self-identified mental-health. In Taylor and Russel-Mayhew's inquiry (2018) into how young women maintain positive embodiment, authors theorize that sociocultural pressures lead to poor self-esteem that can create mental-health struggles including depression and eating disorders because women are taught to view themselves as bodies only and evaluated on appearance, which interrupts wellbeing.

Resisting objectification was a theme across all studies and is described as part of a synergistic relationship that works together with self-care, and physical activity to foster both positive embodiment and wellbeing.

#### 4. Discussion

Positive embodiment is a new topic of research with all eligible papers from 2018-present. This

cutting-edge investigation offers new depth to conversations on the role of the body in positive psychology, and appreciation for the interconnections between dimensions of embodiment. That, for example, there is nuance to recommending yoga interventions and practitioners should consider how environments, instructional strategies, beliefs and motivations for participation are related to the wellbeing benefits a person might or might not receive. While psychology often intends to be value-neutral and issues around bodies, gender, and culture are often framed as social justice concerns, positive psychology aiming for wellbeing beyond the individual, that encompass positive communities and positive societies is a worthwhile direction consistent with the third wave of positive psychology (Lomas et al., 2015). It is a major strength of the research by Piran and colleagues (e.g. Piran, 2017), that theory has emerged from lived-experiences of people from a variety of backgrounds. The grounding in phenomenological experience provides unique opportunity to explore the relationships between embodiment and wellbeing, and how interventions at the individual, community, and societal levels may be impactful. With increased awareness of the importance of self-care, the connection between mindful self-care as facilitative of positive embodiment (Cook-Cottone, 2015, 2018) provides insight into why self-care matters, and potentially, why it works. While further research is needed to connect these constructs with one another and with various dimensions of wellbeing, there are indications this path is worth exploring. Questions remain at this point, including whether positive embodiment represents a dimension of wellbeing previously overlooked, if it is a factor impacting wellbeing, and what direction of causality between these relationships may be.

#### 4.1 Signposts for practitioners

Adding Nuance to Embodied Approaches in Positive Psychology	
<i>Body-focused interventions</i>	<i>Overview of Research and Applications</i>
Physical Activity	<ul style="list-style-type: none"> <li>- Research provides evidence for the impact of environments of yoga/exercise on wellbeing outcomes</li> <li>- Yoga and fitness activities that focus on appearance may undermine benefits</li> <li>- Attunement with Exercise (AWE) model may provide explanation and guidance for exercise facilitating positive embodiment (Calogero et al., 2019)</li> </ul>
Eating Behaviour	<ul style="list-style-type: none"> <li>- Practitioners and coaches should be mindful of eating pathologies when discussing dietary changes</li> <li>- Intuitive eating has been shown to have strong connections with positive constructs (Linardon et al., 2021)</li> <li>- Practitioners should consider adopting a weight-neutral approach when working with the body</li> </ul>
Attuned self-care	<ul style="list-style-type: none"> <li>- Self-care adds a 'bottom up' approach to cognitive and emotional approaches common in positive psychology</li> <li>- Self-care seems to play a role in both developing and maintaining positive embodiment</li> </ul>
Positive sexuality	<ul style="list-style-type: none"> <li>- Moving from other-validated sexuality to self-validated sexuality increased self-reported wellbeing and was accessed through embodied practice of yoga</li> </ul>
Resisting objectification	<ul style="list-style-type: none"> <li>- Developing a subjective experience of the self rather than an object of gaze appears important for wellbeing</li> </ul>

Mindfulness	<ul style="list-style-type: none"> <li>- Formal and informal approaches to mindfulness may be helpful for positive embodiment, attunement, and wellbeing</li> <li>- Mindfulness may be related to ‘attunement’ described in the ARMS models, and to models of Authenticity from positive psychology</li> </ul>
Supportive communities	<ul style="list-style-type: none"> <li>- Supportive community as a protective factor (Piran, 2017), thus connecting to like-minded others is worth exploring, group-based interventions may be impactful</li> <li>- School-based intervention showed lasting impact for girls, which is promising for promoting positive embodiment, and wellbeing, and potentially reducing pathology</li> <li>- Group nature of yoga and physical activity interventions may influence efficacy for promoting positive embodiment</li> </ul>

#### 4.2 Beyond the individual

While positive psychology has focused primarily on individual wellbeing, interventions targeting positive embodiment have so far have been in groups. Piran describes the protective mechanism of supportive communities (2017) and Cook-Cottone and Guyker (2018) include supportive relationships as a domain of mindful self-care. This focus on group and social interventions is potentially impactful for future interventions. Mafriqi and Piran (2019) have explored how supportive peer connections may be an optimal environment for fostering positive embodiment as peers create their own body-related norms regarding body-talk, body acceptance, challenging ideals, and social power. Family environments may also play a critical role in cultivating positive embodiment as much of what children learn about bodies and the world begins in families and may provide an important buffer against sociocultural environments that threatens embodiment (Tylka, 2019). The importance of social interventions and the creation of supportive communities may provide guidance to positive psychology practitioners in the design and delivery of interventions aimed at increasing positive embodiment. Proponents of positive embodiment emphasize the importance of protective factors across the mental, social, and physical domains, in considering the World Health Organization’s definition of health as “a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity” (WHO, 1946), there is potential for positive embodiment, alongside positive psychology, to inform public policy in the promotion of wellbeing (Rodgers, Franko, & Lowy, 2019).

#### 4.3 The LIFE model and third wave positive psychology

The DTE and ARMS models, with their operationalisation of multiple spheres of influence on wellbeing, contain many parallels to the Layered Integrated Framework Example (LIFE) model proposed for use by positive psychology practitioners (Lomas, Hefferon, & Ivtzan, 2015). This includes both the DTE (Piran, 2017) and the LIFE model (Lomas et al., 2015) drawing on the work of Bronfenbrenner’s experimental ecology of human development concept (1977), and the recognition across models, of multiple spheres of influence on individuals’ experiences including society and culture. Further, positive embodiment has conceptual underpinnings in common with third-wave positive psychology in the incorporation of critical and feminist psychology perspectives, the acknowledgement of socio-cultural influences, and systems of power, and in the inclusion of qualitative perspectives grounded in lived experience (Lomas et al., 2020). This third-wave represents an epistemological shift away from the positivist, individual focus of preceding waves, and meshes well with constructivist, dialectical relationships between person

and environment reflected in models of embodiment.

#### *4.4 Weight-neutral perspective and best practices*

Incorporating social justice perspectives and scientific inquiry, the Health at Every Size (HAES) perspective has been robustly researched and provides strong evidence to move beyond weight-centric models of health (Bacon & Aphramor, 2011). This perspective informs many of the intervention designs in the located studies and bolsters support to a HAES perspective in the promotion of wellbeing. LaMarre and Daniélsdóttir (2019) make the case for including a non-weight centric model of health and wellness, as well as a celebration of body diversity, as pathways to positive embodiment. This angle, authors claim, is supported by both research and social justice perspectives. Bennet et al. (2019) further discuss promoting resistance to weight stigma, particularly at the societal level as weight stigma threatens psychological wellbeing and physical health. Authors argue that while research is ongoing, the costs of waiting until more is known outweigh the risks of challenging attitudes of weight bias (Bennet et al., 2019). For positive psychology practitioners, appreciating the role of weight stigma and anti-fat bias in undermining wellbeing and disrupting embodiment could motivate the removal of dieting examples in textbooks and discussions. Practitioners interested in using embodied approaches to wellbeing could benefit greatly from adopting a weight-neutral perspective in the interest of doing no harm and just as practitioners screen for potential risks with PPIs inappropriate for those with anxiety or depression, practitioners should screen for disordered eating before encouraging food- or exercise-related interventions.

#### *4.5 Strengths, limitations, and future directions*

A strength of this review is that it provides a snapshot of the current state of research on an emerging topic area across methodologies and provides a bridge to practice and further research for those interested in exploring positive embodiment through a positive psychology lens. Consistent with the remit of narrative reviews, this study has sought to locate evidence that addresses the research questions rather than conduct a prescriptive process more appropriate for a systematic review. Of the ten papers located, five are limited to a single gender (girls and women). Participants studied varied by ethnicity and location but all research was performed in Western contexts (Canada, USA, Australia, Scandinavia, and Western Europe). Ages of participants varied with some utilizing student populations and others being community samples. Due to a lack of consistency in measurement tools used, there is limited potential for cross-comparison. While this makes it difficult to compare studies across the board, taken together, the set of studies indicate what positive embodiment currently offers to discourse on wellbeing. The studies approach the concept from different angles and each adds insight. In the extraction of data, care was taken to focus on the outcomes and themes identified by the original authors and not to interpret beyond those findings. The preceding tables and themes summarize the findings and openly present the subject area as limited in scope and without sufficient breadth at this point generalize findings. Further studies of validity, reliability, and structure are needed including potential revisions and exploration with wider populations. As a narrative review, there is a qualitative nature that allows for subjectivity and while care was taken in the reporting of the existing research, it is acknowledged that the researcher impacts the shaping of the discussion. Future directions include further exploration of tools and models discussed including connections with wellbeing, studies with broader populations (including wider variety in location, culture, gender, and sexualities), further research on how weight stigma and eating behaviour may affect embodiment and wellbeing, further work to integrate these concepts into

practice, and replication of current work with new and broader samples.

## 5. Conclusion

Positive embodiment has both demonstrated and discussed links to wellbeing and thus should be considered important to researchers and practitioners of positive psychology. This construct, associated models and scales, provides many opportunities for further engagement including adding nuance to the understanding of the role of the body in wellbeing and directions for further research. While current literature is limited in scope, consistency of scale use, and somewhat narrow populations, future research may fill gaps in the knowledge. While generalizability is not yet possible, practitioners can explore the interconnections between concepts and incorporate further refinement in work they do. It is the hope that this introduction to positive embodiment sparks conversation, reflection, and exploration of the ideas from those in the wellbeing field.

## Conflict of interest statement

The authors report no conflicts of interest.

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