# Research: Life Drawing & Adolescents

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"It Stops Your Brain from Making Assumptions About What a Body Should Look Like": The Impact of Life Drawing on Adolescents, with Recommendations for Practitioners

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#### Abstract

Studies have shown that life drawing can have positive effects on body image in adults. Here, we examined the effect of life drawing in a sample of British adolescents (N=14). Participants completed measures of positive body image, appearance investment, and self-esteem before attending three life drawing sessions over seven weeks. Following the final session, they completed the same quantitative measures and answered open-ended questions about their experiences. Analyses of quantitative data showed that participants had

significantly higher positive body image and lower dysfunctional appearance investment following the final session. However, responses to the open-ended questions suggested that most participants did not believe the sessions had impacted their body image. The latter data also suggested that participants felt discomfort with adult nudity, although most also indicated that the sessions had changed their perceptions of others. Based on our results, we make a number of recommendations for practitioners.

Keywords: Life drawing; Body image; Embodiment;
Art; Body appreciation

"It Stops Your Brain from Making Assumptions About What a Body Should Look Like": The Impact of Life Drawing on Adolescents, with Recommendations for Practitioners

Body image can be generally thought of as the "inside view" that a person has about their own body (Cash, 2004); more specifically, it is a multifaceted construct encompassing the thoughts, feelings, beliefs, and behaviours related to one's body (Cash & Pruzinsky, 2002; Cash & Smolak, 2011). Negative body image, in particular, is a major concern in adolescents, with studies suggesting upwards of 50% of girls and 35% of boys are dissatisfied with their appearance, and that almost a half of adolescents are engaging in bodychange strategies such as excessive dieting (for a review, see Smolak & Thompson, 2009). In addition, negative body image has been reliably associated with a range of negative outcomes in adolescents, including the onset of disordered eating (e.g., Mitchison et al., 2017) and poorer psychological functioning (e.g., Bucchianeri et al., 2016). Given these associations, scholars have sought to identify factors and activities that may protect against negative body image and promote more positive body experiences (Cook-Cottone, 2015; Tylka & Wood-Barcalow, 2015a).

One such activity that holds out promise in promoting positive

body image is life drawing (Swami, 2016, 2017), where individuals produce drawings of the human form from observations of a live, nude model. Swami (2016) recently proposed that the process of observing and receiving sensory feedback from a nude human body, and the active reproduction of that body in an aesthetic context, may contain embodying elements that lead to the development of more positive body image. "Embodying" in this sense refers to processes and activities through which individuals gain a sense of connection with their bodies, feel corporeally empowered, voice their bodily desires, and become more attuned to bodily needs (Piran, 2002, 2015, 2016), which in turn is thought to promote positive body image (Menzel & Levine, 2011). For example, life drawing may provide individuals with the space to explore relationships with their own bodies; that is, it may provide individuals with an opportunity to consider how they view and treat their own bodies, and to actively counter tendencies to self-objectify. In addition, life drawing may also provide opportunities to question assumptions about the normativity of beauty ideals and practices and to develop greater body confidence.

In support of this general hypothesis, Swami (2016, Study 1) found, in a sample of British adults (N=138), that greater lifetime attendance at life drawing sessions was significantly associated with higher body appreciation in women and men, and with lower drive for thinness and social physique anxiety in women (associations with drive for muscularity and social physique anxiety were not significant in men). Swami (2016, Study 2) also reported that participating in a single life drawing session had a positive impact on state body image and appearance satisfaction (ds=0.60) in a sample of British undergraduate women (N=37). Further work has shown that the positive effects of life drawing on state body image can be attributed to the active process of reproducing a live, nude model as opposed to non-human objects (Swami, 2017, Study 1) and that positive effects occur irrespective of whether

artists observed a sex-congruent or -incongruent model (Swami, 2017, Study 2).

To date, however, only one study has examined the longer-term effects of life drawing: Swami (2017, Study 3) examined the impact of attendance at six weekly life drawing sessions on body image in a sample of British undergraduate women and men (N=23). He reported that, compared to pre-intervention, participants at post-intervention reported significantly higher body appreciation (d=0.57), body pride (d=0.54), and embodiment (d=0.82), and significantly lower social physique anxiety (d=0.48). However, there was no significant difference between pre- and post-intervention scores on drive for thinness in women or drive for muscularity in men. Taken together, these studies suggest that life drawing may have positive impacts on facets of positive body image, although its impact on facets of negative body image may be negligible.

An important consideration of the findings of Swami (2016, 2017) is that they were based on adult participants, and the extent to which positive effects will be replicated in younger age groups is not immediately apparent. For example, Stanhope (2013) examined the impact of participation in a life drawing session in a sample of female art and design students from London aged between 15 and 16 years (N = 20). Based on responses to open-ended questions, written observations during the session, and follow-up interviews, Stanhope concluded that life drawing can begin a process of challenging body- and appearance-related anxieties, as well as gendered norms of appearance. However, Stanhope also reported that participants found the idea of life drawing "weird" (p. 354) and that there was an underlying anxiety and discomfort in the cohort about the model's nakedness. This anxiety stemmed from a perceived association between nudity and sex, and concerns over participants' own body image. Indeed, although three-quarters of the sample indicated that the experience was a positive one, a small minority indicated difficulty moving beyond the

nakedness of the model and all expressed body image fears either before or during the session.

## The Present Study

The available evidence suggests that life drawing may have positive effects on body image in adults (Swami, 2016, 2017), but also that effects in adolescents may be attenuated by specific age-related fears and concerns (e.g., limited previous exposure to the nude adult form; Stanhope, 2013). In the present study, we sought to shed new light on the impact of life drawing on body image in adolescents. Between January and March 2017, a self-selecting sample of British adolescents took part in three life drawing sessions for the first time. We used this as an opportunity to examine the impact of participation on positive body image (i.e., body appreciation, body image flexibility, and body pride) and related concepts (i.e., appearance investment and self-esteem) using a quantitative design. The inclusion of multiple measures allowed us to provide broad coverage of different facets of the positive body image construct (see Webb, Wood-Barcalow, & Tylka, 2015), but also allowed us to examine the impact on psychological investment in appearance and self-esteem. Based on Swami (2016, 2017), we hypothesised that participants would show significant improvements in body image and self-esteem, and reductions in investment in appearance, at postintervention compared to pre-intervention.

In addition, participants answered a series of open-ended questions following the final session, which allowed us to more fully explore their experiences. These open-ended questions were designed to answer the following research questions: (a) what aspects of the sessions did the participants like or dislike? (b) what impact did participants believe the sessions had on their body image and well-being more generally? (c) what impact did the sessions have on how participants view others? and (d) what recommendations would participants suggest for practitioners intending to use life

drawing to promote positive body image? Analyses of the data generated through these open-ended questions allows us to make some preliminary recommendations for scholars and practitioners wishing to use life drawing as a tool to promote more positive body image.

## Method

# Design

The project used a pre- and post-intervention design, in which participants completed quantitative measures of body image, appearance investment, and self-esteem prior to the first life drawing session. They then attended three, two-hour life drawing sessions over a period of seven weeks. Following the final session, participants completed the same set of quantitative measures, as well as an open-ended questionnaire about their experiences.

# **Participants**

The participants of this study were 11 girls and 3 boys from a school in Essex, United Kingdom. Participants ranged in age from 16 to 18 years (M = 16.79, SD = 0.58) and in self-reported body mass index (BMI) from 18.52 to 25.64 kg/m<sup>2</sup> (M = 21.86, SD = 2.62). All but one of the participants self-reported as being of British White ancestry.

# **Quantitative Measures**

Body appreciation. Participants completed the Body Appreciation Scale-2 (BAS-2; Tylka & Wood-Barcalow, 2015b), a 10-item measure of acceptance of one's body, respect and care for one's body, and protection of one's body from unrealistic beauty standards (sample item: "I respect my body"). All items were rated on a 5-point scale, ranging from 1 (Never) to 5 (Always), and an overall score was computed as the mean of all items. Higher scores on this scale reflect greater body appreciation. Tylka and Wood-Barcalow (2015) reported that

BAS-2 scores have a one-dimensional factor structure, adequate internal consistency, good test-retest reliability after 3 weeks, and good patterns of convergent and divergent validity. In the present study, Cronbach's  $\alpha$  for this scale was .88 at the first testing session and .86 at the second testing session.

Body image flexibility. The 12-item Body Image-Acceptance and Action Questionnaire (BI-AAQ; Sandoz, Wilson, Merwin, & Kellum, 2013) measures the degree of negative-body related thoughts, behaviors, and affect that stifle growth when experiencing aversive body-related thoughts and feelings (sample item: "To control my life, I need to control my weight"). Items on this scale were rated on a 7-point scale, ranging from 1 (Never true) to 7 (Always true). In reviewing this measure, Webb and colleagues (2015) suggested that it provides a preliminary measure of body image flexibility. An overall score for the BI-AAQ was computed as the mean of all reverse-coded items, so that higher scores reflect greater body image flexibility. Scores on the BI-AAQ have a onedimensional factor structure, good internal consistency, good test-retest reliability up to 3 weeks, and good patterns of construct validity (Sandoz et al., 2013). In the present study, Cronbach's  $\alpha$  for this scale was .82 at the first testing session and .87 at the second testing session.

Body pride. To measure body pride, we used the Authentic Pride subscale of the Body and Appearance Self-Conscious Emotions Scale (BASES-AP; Castonguay, Sabiston, Crocker, & Mack, 2014). This is a 6-item measure that reflects body pride as a sense of personal appearance-related achievement (sample item: "I am proud of my appearance efforts"). Items were rated on a 5-point scale, ranging from 1 (Never) to 5 (Always). Scores were averaged so that higher scores reflect greater authentic body pride. Castonguay et al. (2014) reported that BASES scores had good factorial validity and that subscale scores had good test-retest reliability after 2 weeks and good construct

validity (Castonguay et al., 2014). In the present study, Cronbach's  $\alpha$  for the BASES-AP subscale was .92 at the first testing session and .94 at the second testing session.

**Investment in appearance**. The Appearance Schemas Inventory-Revised (ASI-R; Cash, Melnyk, & Hrabosky, 2004) was used to measure psychological investment in appearance. This is a 20item scale that measures the extent to which individuals define themselves in terms of their physical appearance, which they consider influential in social and emotional experiences (Self-Evaluative Salience; 12 items; sample item: "When I see good-looking people, I wonder about how my own looks measure up") and the extent to which individuals attend to their appearance and engage in appearance-management behaviours (Motivational Salience; 8 items; sample item: "I try to be as physically attractive as I can be"). All items were rated on a 5-point scale ranging from 1 (Strongly disagree) to 5 (Strongly agree) and subscale scores were computed as the mean of items associated with each factor. Higher scores on both subscales are reflective of greater investment in appearance, but only higher Self-Evaluative Salience scores are considered to be dysfunctional (Cash et al., 2004). Scores on the ASI-R have good patterns of construct and convergent validity (Cash et al., 2004). In the present study, internal consistency coefficients for both subscales were adequate at the first (Cronbach's  $\alpha \ge .82$ ) and second testing sessions (Cronbach's  $\alpha$  $\geq$  .85).

Self-esteem. Participants were asked to complete the Rosenberg Self-Esteem Scale (RSES; Rosenberg, 1965), a widely-used 10-item measure of an individual's overall sense of self-worth. Items were rated on a 4-point scale ranging from 1 (Strongly disagree) to 4 (Strongly agree) and an overall score was computed as the mean of all items, with higher scores reflecting greater self-esteem. Extensive evidence supports the factorial and construct validity of RSES scores, as well as its internal consistency (Gray-Little, Williams, & Hancock,

1997). In the present study, Cronbach's  $\alpha$  for this scale was .84 at the first testing session and .85 at the second testing session.

**Demographics.** Participants provides their demographic details consisting of sex, age, ethnicity, height, and weight. We used the latter two items to compute self-reported BMI (for descriptive purposes only).

## Open-Ended Questionnaire

Following the final life drawing session, participants completed ten open-ended questions developed for the present study (see Table 1). These questions were developed through discussion between the authors and through a consultation of the relevant literature. Two questions asked participants to identify what they enjoyed or did not enjoy in the life drawing sessions (Questions 1 and 2), two questions concerned participants' beliefs about the impact of the sessions on their body image and well-being more broadly (Questions 3 and 4), one question concerned participants' beliefs about the impact of the sessions on their perceptions of others (Question 5), and three questions concerned the participants' beliefs about whether life drawing could improve body image in others and their recommendations for practitioners (Questions 6-8). A final question asked participants if there was anything they would like to add that had not been previously covered, but was dropped from analysis as none of the participants had anything to add. Instructions to participants were adapted from Goldsmith and Byers (2016). Open-ended questions are useful because they allow participants to express opinions without being influenced by the researcher and because they increase the likelihood of discovering responses that researchers may not have considered a priori (Schuman & Presser, 1996).

#### **Procedures**

Prior to conducting this research, we obtained ethics permission from the relevant departmental ethics committee. In January 2017, the second author — an art and photography teacher at the study site — advertised places for life drawing sessions as an extra-curricular activity to all students taking A-Level Art at the school. Interested students were given further information about the life drawing sessions (e.g., dates and venue, and the nature of life drawing with nude models) and were encouraged to take part with no expectation that they should also participate in the psychological study. As it turns out, all participants who signed up to the life drawing sessions also agreed to take part in the study and provided written informed consent. In addition, permission to participate was sought and obtained from each participant's primary caregiver. None of the participants had previously attended a life drawing session, but had been developing artistic skills, including working with a range of media, as part of their A-Level course.

All participants took part in three, two-hour life drawing sessions, held on school premises on the  $31^{\rm st}$  of January, the 7<sup>th</sup> of March, and the 21<sup>st</sup> of March 2017 during school time. The spacing of the sessions was based on practical considerations beyond our immediate control (e.g., availability of space at the school, timetabling issues, availability of the teacher, etc.). At the start of each session, participants were welcomed by the second author, who also introduced the sessions. Prior to the start of the first session, participants were given a paper-and-pencil questionnaire, which included the quantitative measures described above (presented in a pre-randomised order for each participant). Participants completed the anonymous questionnaire individually and returned it to the second author in a sealed envelope. The second author then introduced a model for each session: for the first and third sessions, the model was a White woman in her mid-thirties and of average height and weight; for the second session, the model was a Black man in his late fifties and of average height and weight, but toned. At the first session, the model initially wore tight clothing, before being clothed in under-garments, and finally was nude for the last hour (during subsequent sessions, models were nude throughout). During each session, participants were encouraged to work with a range of materials and types of paper, with all materials provided by the school. The second author also led various drawing exercises (e.g., to improve measuring techniques), "fast drawing" with short poses by the models, and longer drawing periods with long poses by the models. Following the final session, participants were asked to complete a paper-and-pencil questionnaire with the same quantitative measures described above (presented in a prerandomised order for each participant). Once this was completed and returned, participants were provided with a 10page booklet containing the open-ended questions, which they were asked to complete individually and anonymously. Nominal codes, destroyed prior to analyses, were used to link participants' quantitative data across testing sessions. Participants received no remuneration and, at the completion of the final session, they were given written debrief information.

# Data Analysis

For all quantitative analyses, data were pooled across participant sex because of the small number of male participants. This is also consistent with the data analytic strategy used by Swami (2017, Study 3), based on the lack of significant sex effects reported in Swami (2017, Study 2). To compare scores from before the first session with scores from after the final session, we computed a series of paired-samples t-tests. Because of the large number of comparisons, a Bonferroni correction was applied, such that p = .05/7 = .007. Effect sizes were corrected for dependence among means (Morris & DeShon, 2002).

Data generated from the open-ended questions were analysed using qualitative content coding analysis, which allows for the development of a coding scheme through comparison of participant responses to categories (Neuendorf, 2002). The first author (a male professor of psychology with expertise in qualitative content coding) began by reviewing the transcripts several times and generated a coding scheme in consultation with a colleague unaffiliated with the study (a female psychology lecturer with expertise in qualitative data analysis). New codes were generated for each question when any text did not fit with existing categories and analysis proceeded until all 14 transcripts had been analysed. Content codes were only included based on manifest content (i.e., based on what participants wrote and not on what could be inferred). Examples of each coded were discussed to develop labels and conceptual descriptions that summarised the meaning of each label. Because of conceptual similarities in responses to Questions 1 and 2, Questions 3 and 4, and Questions 6 and 7, respectively, responses were collapsed and coded together. Next, the first author recoded the data in accordance with the final coding structure. Finally, an independent coder (a female postgraduate student in psychology) analysed the transcripts and labelled each response according to the identified codes. Inter-rater agreement between the first author and the independent coder was measured using Cohen's Kappa (κ), which Krippendorf (1980) conservatively suggested be interpreted as follows for content coding analysis: values ≤ .67 indicate lack of agreement and should be discounted, .68-.80 indicate fair agreement and conclusions can be tentatively drawn, and .81-1.00 indicate substantial agreement and definite conclusions can be drawn.

## **Results**

#### **Quantitative Data**

Descriptive statistics and the results of the comparisons are reported in Table 2. As can be seen, participants reported significantly higher body appreciation, body image flexibility, and body pride, as well as significantly lower self-evaluative salience following the final life drawing session compared to before the first session. The dependence-corrected effect sizes of these differences were all large. On the other hand, the paired comparisons for motivational salience and self-esteem did not reach significance. We also conducted a descriptive analysis of the quantitative data at the level of the individual. This analysis indicated that 13 of the 14 participants showed increases in body appreciation, body image flexibility, and 12 showed increases in body pride, and 10 showed decreases in self-evaluative salience. This suggests that the significant changes were unlikely to have been driven by outlying participants.

### **Qualitative Data**

Aspects that were liked or disliked. Participants identified a range of aspects of the life drawing sessions that they enjoyed or did not enjoy. In total, 9 codes emerged in this analysis and the percentage of participants who reported each aspect is reported in Table 3, along with examples of each aspect. All participants said they enjoyed the opportunity to develop new skills or drawing techniques ( $\kappa = .84$ ) and just over a half said that they liked the opportunity to take part in a unique experience ( $\kappa = .81$ ). A small number of participants appreciated being able to take part in life drawing with their friends and peers, which helped to ease feelings of discomfort ( $\kappa = .84$ ). Conversely, 6 codes relating to aspects that were disliked emerged in our analysis. Although one participant said that there was no aspect that was disliked ( $\kappa = 1.00$ ), a majority (71%) said they experienced feeling of discomfort at seeing nudity ( $\kappa = .82$ ). A separate element of dislike concerned not nudity per se, but rather discomfort with model positioning, particularly if this led to models showing "too much" of their bodies or because participants felt sympathetic towards models having to pose in uncomfortable postures ( $\kappa = .83$ ). Half of participants also disliked the "fast drawing" elements of the sessions, finding these too stressful ( $\kappa = .77$ ). A minority of participants did not enjoy the group setting, saying that being with known others encouraged improper behaviour (e.g., laughing or joking), which was perceived as either rude or distracting ( $\kappa = .85$ ). One participant did not like the scheduling of the sessions during school time ( $\kappa = 1.00$ ).

Impact on body image and well-being. Only three codes emerged in terms of participants' views about the impact of the life drawing sessions on their own body image or well-being in general (see Table 4). A majority of participants (86%) said that the sessions had no impact on how they view, think, or feel about their bodies ( $\kappa = .87$ ), while two participants (14%) said they had developed greater body pride as a result ( $\kappa = .84$ ) and one participant (7%) said they now felt more confidence in themselves ( $\kappa = .94$ ).

Impact on how participants view others. Four codes were extracted in terms of participants' beliefs about how the life drawing sessions had impacted their views of other people (see Table 5). While a minority said that the sessions had no impact on their perceptions of others ( $\kappa$  = .90), just over a half said that they were now more respectful and accepting of others ( $\kappa = .80$ ); that is, they felt they were less judgemental about what others chose to do with their bodies. Just under a half of participants said they were now more accepting of body diversity and that taking part in life drawing helped them "see through" the idea that only particular body types or shapes are beautiful ( $\kappa = .81$ ). A smaller number of participants also said that life drawing challenged their views about how similar people might be; that is, participants now felt that there could large differences in psychological traits such as confidence between individuals  $(\kappa = .77).$ 

Benefits of life drawing for other people. While participants

generally did not feel that the life drawing sessions had had much of an impact on themselves (see above), they did suggest that life drawing could bring real benefits for other people. Nine codes emerged in this analysis and are reported in Table 6. A majority of participants (88%) believed that life drawing could help people develop more grounded ideas of what "real" bodies look like ( $\kappa = .82$ ), develop greater body confidence  $(\kappa = .85)$ , or develop greater acceptance of the self despite the self's flaws or imperfections ( $\kappa = .82$ ). Half of participants believed life drawing could be effective at challenging media representations of ideal bodies ( $\kappa = .81$ ). A minority of participants (29%) emphasised the utility of life drawing in helping individuals improve artistic abilities ( $\kappa =$ .89) or influencing people to not automatically judge others  $(\kappa = .80)$ . Two participants (14%) suggested that life drawing could help individuals find life inspiration that might lead to positive outcomes ( $\kappa = .88$ ) or develop a sense of individuality and uniqueness ( $\kappa = .89$ ). However, two participants (14%) did not believe that life drawing would have any real impact on others ( $\kappa = 1.00$ ).

Recommendations for practitioners. Six codes emerged in our analysis of participants' recommendations for practitioners wishing to use life drawing to promote positive body image in young people. All but two participants (86%) encouraged greater use of more diverse models, particularly in terms of body types ( $\kappa = .92$ ); some participants linked this with greater effectiveness of life drawing at helping young people develop more realistic ideas about body diversity challenge media ideals. A majority of participants (71%) commented on the frequency of life drawing sessions, indicating that greater frequency of sessions (e.g., minimally once a fortnight or once a week) would have a larger impact on image ( $\kappa = .81$ ). Half of participants recommendations for creating safe spaces in which to draw ( $\kappa =$ which included suggestions such as encouraging participants to adopt a more mature outlook or reminding participants to be respectful towards the models. Two participants (14%) suggested that life drawing should be offered to younger peers so that benefits could be achieved before young people were deemed at-risk for negative body image ( $\kappa = .88$ ) and two participants also discouraged holding the sessions on school premises, as they found it difficult to later interact with non-attendees ( $\kappa = .94$ ). One participant (7%) encouraged greater freedom to talk and discuss ideas with peers during the session itself, believing this would help alleviate feelings of discomfort ( $\kappa = 1.00$ ).

#### **Discussion**

The first objective of present study was to examine the impact of participating in a series of life drawing sessions on the body image and related constructs in a group of adolescents. Analysis of our quantitative data indicated that, compared to pre-session scores, participants reported significantly higher scores on three facets of positive body image after the final session. In addition, participants also reported significantly lower self-evaluative salience of the importance of appearance following the final session, although there was no significant change in the motivational salience of the importance of appearance or in self-esteem. Taken together, these results corroborate previous work suggesting that life drawing is an activity that can bring real changes in positive body image (Swami, 2016, 2017). Thus, one broad conclusion that might be drawn on the basis of these results is that life drawing can have real benefits in terms of promoting positive body image, whether in adults or adolescents.

More specifically, analysis of our quantitative data indicated that life drawing was associated with improvements in three separate facets of positive body image, namely body appreciation, body image flexibility, and body pride. This is important because it suggests that these benefits are robust (i.e., they are not dependent on the type of measure of positive body image being used). In addition, we found that

participation in the life drawing sessions was also associated with lower scores on self-evaluative salience of the importance of appearance, which Cash and colleagues describe as an excessive or dysfunctional valuation of appearance (e.g., Cash, Jakatdar, & Williams, 2004; Cash, Melnyk et al., 2004; Jakatdar, Cash, & Engle, 2006; Rudiger, Cash, Roehrig, & Thompson, 2007). That is, life drawing may help individuals develop less dysfunctional beliefs about the importance of appearance, although it may not alter attendance to appearance-management behaviours in order to feel attractive. Our results are also noteworthy in demonstrating that the effects of life drawing are limited to positive body image, rather than broader (and related) constructs, such as self-esteem.

Curiously, however, while participants' scores on the quantitative measures demonstrated clear improvements positive body image, analysis of responses to the open-ended questions suggested that most participants did not believe that the sessions had any real impact on their body image or well-being. Indeed, only a small minority of participants indicated that had developed greater body pride. A number of explanations may help to explain these discrepant findings. First, taking the data at face value, it is possible that participants were not fully aware of the changes that had taken place in themselves. For example, it may be the case that participants placed a greater importance on behavioural manifestations of positive body image (i.e., "doing" positive body image such as in terms of self-care, rather than "feeling" positive body image such as more positive affect towards one's body) and, as a result, reported no substantive change in their behaviours when responding to the open-ended questions. Alternatively, the form of the open-ended questions themselves may have limited participant responses: for example, it is possible that participants lacked a clear understanding of the "meaning" of body image (cf. Swami & Knowles, 2013) and, as a consequence, were not able to accurately report on changes.

A further curiosity is that, while most participants felt that the life drawing sessions had not impacted on their own body image, a majority indicated that life drawing could have benefits for others. Indeed, most participants highlighted the usefulness of life drawing in helping people develop more realistic ideas about what bodies actually look like (as opposed to idealised images presented in the media) or in developing greater acceptance of one's own body despite its imperfections (a key element of the body appreciation construct). This again suggests that participants generally believed that life drawing could have a positive impact on body image, but that the life drawing sessions they attended did not have an effect on themselves. In this sense, participants' responses may have been shaped by a form of a pessimism bias (Shepperd, Carroll, Grace, & Terry, 2002), where participants underestimated the impact of life drawing on their own body image while either accurately perceiving or overestimating the impact on others. This suggestion is supported by the analysis of participants' beliefs about the impact that life drawing had on their perceptions of others, where most indicated that they were now more respectful and accepting of others, or that they had a greater appreciation of body diversity.

Responses to the open-ended questions highlight an additional possible explanation for the above discrepancies. When asked to indicate what they enjoyed about the sessions, all participants emphasised the opportunity to develop their skills and technique as artists. Thus, it may be that participants were focused on this element of self-improvement (i.e., they were more focused on functional changes as opposed to experiential changes). A further important point is that, although some participants valued the opportunity to take part in a new experience, a majority also expressed discomfort at seeing nudity. As one participant put it, "The whole naked

part — even though I knew what was going to happen, it was hard not to react". Some participants also expressed discomfort not at the nudity per se, but at what they perceived as "compromising" postures by the models or because they felt sympathetic towards the models having to hold postures. These findings corroborate those of Stanhope (2013), who suggested that adolescents taking part in life drawing may experience anxiety and discomfort at seeing adult nudity, and that it may be difficult for adolescents to move beyond the nakedness of the model. The group setting may be an important consideration here: while some participants suggested that participating in life drawing with known others encouraged distracting, improper behaviour, others suggested that being able to participate with friends helped to alleviate some of their discomfort.

#### **Recommendations for Practitioners**

Based on our broad findings, and especially participant suggestions, we are able to make a number of preliminary recommendations for practitioners. First, and perhaps most importantly, our data suggest that life drawing can bring real improvements in positive body image in adolescents, even if they do not immediately recognise such changes. Second, and on a more practical note, using a diverse range of models should be encouraged, particularly as it may help adolescents to develop more realistic notions about body normativity and challenge beauty ideals they have internalised from wider society (see also Stanhope, 2013). Most of our participants also encouraged more frequent life drawing sessions (e.g., fortnightly or weekly), although this will need to be balanced with practical considerations (e.g., availability of a suitable venue, timetabling, etc.). More challenging is the need to create a safe space for life drawing: one proposal from us is an introductory session where participants are given an opportunity raise any anxieties or fears they may have about nudity prior to actually participating in life

drawing. Practitioners could also use such an introductory session to remind adolescents about the importance of being respectful, while also being mindful of participant's own concerns.

Practitioners also need to be cognisant of the broader context in which life drawing takes place, particularly in school settings where non-participants may be curious about what occurs in life drawing sessions. Arranging life drawing sessions off-site (e.g., in art studios) may be one way of dealing with this issue. In addition, practitioners also need to consider the group setting in which life drawing takes places, particular when that group includes known peers. Including formalised breaks during life drawing sessions, during which participants are encouraged to discuss their discomfort with peers or practitioners, may be a useful means of alleviating some anxiety while maintaining some formality during the session itself. The use of soft-playing music during the sessions may also be worth investigating as a means of reducing anxiety. Finally, in addition to an introductory session, it may also be useful for practitioners to plan a closing session in which participants are encouraged to think about, and discuss, the effects that life drawing may have had in terms of body image and broader well-being. Such a closing session may also be a useful opportunity for practitioners to discuss with participants any ongoing concerns that may have emerged from the life drawing sessions.

#### **Limitations and Conclusion**

Of course, this study is not without its limitations, one of which was the lack of a control group, which is important for a number of reasons. First, because our sample was self-selecting, we cannot rule out the possibility that pre-existing traits (e.g., artistic ability, talent, interest in art) meant this group would have been more likely to experience the benefits of life drawing. Second, the lack of a control group means that we cannot clearly attribute any

changes to intervention effects or rule out the possibility that other, extraneous factors influenced participant body image over time. Such extraneous factors might have included involvement in physical activity, changes in media literacy, and peer influences that we did not consider. In part, the omission of a control group in the present work was due to practical considerations (i.e., due to school timetabling concerns, it was not possible to recruit a separate sample of control students). As such, an urgent next step for future research on this topic is the use of a parallel-groups randomised controlled trial, which would have the benefit of proper randomisation that minimises allocation biases, balances prognostic factors, and included a control group.

A further limitation of the present work was the small sample size of the cohort, which was an outcome of practical considerations (i.e., the small number of students at the school who took the relevant course). We acknowledge that the small sample size may have led to inflated effects and may mean low reproducibility, which could be rectified through the inclusion of participants from multiple schools. In addition, the small sample size meant that we were not able to conduct further analyses at the subsample level (e.g., by participant BMI). It is also not possible to entirely discount social desirability effects: for example, participants may have altered their responses to the quantitative measures in socially desirable ways or because they were able to guess the study hypothesis. A related limitation is that participants were mostly White with BMIs mainly in the normal range. Thus, our findings may have limited generalisability to other demographic groups (e.g., groups of other ethnicities or more diverse body sizes).

In terms of the open-ended questions, it should be highlighted that participants provided written responses and, as such, their responses tended to be brief. Although this method has the benefit of anonymity, future research could build on the present work by using one-to-one or focus group interviews. Face-to-face interviews may generate more detailed and nuanced information about the impact of life drawing on body image and may also help to resolve some of the discrepancies we found between responses to the quantitative measures and open-ended questions. Likewise, because of the guarantee of anonymity, we were not able to conduct member checks (i.e., determining whether participants believed the codes we derived were an accurate reflection of their experiences). In addition, the small within-group number of boys who participated meant that we could not fully interrogate sex effects (i.e., whether the distribution of responses to the open-ended questions varied as a function of participant sex). Finally, it would have been useful to specifically question participants if understood the intention of the quantitative element of the study (i.e., their responses to the body image scales), as this might have gone some way to dealing with the issue of social desirability.

Nevertheless, the present work adds to the available literature by showing that life drawing can have a positive impact on adolescent body image. Indeed, the large effect reported in the present study are particularly encouraging, even if most participants did not believe the sessions had changes how they view, think, or feel about their bodies. In addition, our results suggest that life drawing may have added benefits, such as influencing how participants think about others. Our results also allowed us to make a number of preliminary recommendations for practitioners, the most important of which is perhaps the need to provide safe spaces in which life drawing can take place but also where participants are able to express and explore concerns that they may have about nudity. We hope practitioners find these recommendations useful and that future work will build on the present work to further demonstrate how and when life drawing brings positive effects in terms of body image.

#### References

- Bucchianeri, M. M., Fernandes, N., Loth, K., Hannan, P. J., Eisenberg, M. E., & Neumark-Sztainer, D. (2016). Body dissatisfaction: Do associations with disordered eating and psychological well-being differ across race/ethnicity in adolescent girls and boys? *Cultural Diversity and Ethnic Minority Psychology*, 22, 137-146. doi:10.1037/cdp0000036
- Cash, T. F. (2004). Body image: Past, present, and future. Body Image, 1, 1-5. doi:10.1016-S1740-1445(03)00011-1
- Cash, T. F., Jakatdar, T. A., & Williams, E. F. (2004). The Body Image Quality of Life Inventory: Further validation with college men and women. *Body Image*, 1, 279-287. doi:10.1016/S1740-1445(03)00023-8
- Cash, T. F., Melnyk, S. E., & Hrabosky, J. I. (2004). The assessment of body image investment: An extensive revision of the Appearance Schemas Inventory. *International Journal of Eating Disorders*, 35, 305-316. doi:10.1002/eat.10264
- Cash, T. F., & Pruzinsky, T. (Eds.) (2002). *Body images: A handbook of theory, research, and clinical practice*. New York, NY: Guilford Press.
- Cash, T. F., & Smolak, L. (Eds.) (2011). Body image: A handbook of science, practice, and prevention. New York, NY: Guilford Press.
- Castonguay, A. L., Sabiston, C. M., Crocker, P. R. E., & Mack, D. E. (2014). Development and validation of the Body and Appearance Self-Conscious Emotions Scale (BASES). *Body Image*, 11, 126-136. doi:10.1016/j.bodyim.2013.12.006
- Cook-Cottone, C. P. (2015). Incorporating positive body image into the treatment of eating disorders: A model for attunement and mindful self-care. *Body Image*, *14*, 158-167. doi:10.1016/j.bodyim.2015.03.004

Goldsmith, K. M., & Byers, E. S. (2016). Perceived impact of body feedback from romantic partners on young adults' body image and sexual well-being. *Body Image*, *17*, 161-170. doi:10.1016/j.bodyim.2016.03.008

Gray-Little, B., Williams, V. S., & Hancock, T. D. (1997). An item response theory analysis of the Rosenberg Self-Esteem Scale. *Personality and Social Psychology Bulletin*, 23, 443-451. doi:10.1177/0146167297235001

Jakatdar, T., Cash, T., & Engle, E. (2006). Body-image thought processes: The development and initial validation of the Assessment of Body-Image Cognitive Distortions. *Body Image*, 3, 325-333. doi:10.1016/j.bodyim.2006.09.001

Krippendorff, K. (1980). Content analysis: An introduction to its methodology. Thousand Oaks, CA: Sage.

Mahlo, L., & Tiggemann, M. (2016). Yoga and positive body image: A test of the Embodiment Model. *Body Image*, 18, 135-142. doi:10.1016/j.bodyim.2016.06.008

Menzel, J. E., & Levine, M. P. (2011). Embodying experiences and the promotion of positive body image: The example of competitive athletics. In R. M. Calogero, S. Tantleff-Dunn, & J. K. Thompson (Eds.), *Self-objectification in women: Causes, consequences, and counteractions* (pp. 163-186). Washington, DC: American Psychological Association.

Mitchison, D., Hay, P., Griffiths, S., Murray, S. B., Bentley, C., Gratwick-Sarll, K., Harrison, C., & Mond, J. (2017). Disentangling body image: The relative associations of overvaluation, dissatisfaction, and preoccupation with psychological distress and eating disorder behaviors in male and female adolescents. *International Journal of Eating Disorders*, 50, 118-126. doi:10.1002/eat.22592

Morris, S. B., & DeShon, R. P. (2002). Combining effect size estimates in meta-analysis with repeated measures and

independent-groups designs. Psychological Methods, 7, 105-125.
doi:10.1037/1082-989X.7.1.105

Neuendorf, K. A. (2002). The content analysis guidebook. Thousand Oaks, CA: Sage.

Piran, N. (2002). Embodiment: A mosaic of inquiries in the area of body weight and shape preoccupation. In S. M. Abbey (Ed.), Ways of knowing in and through the body: Diverse perspectives on embodiment (pp. 211-214). Welland, Canada: Soleil.

Piran, N. (2015). New possibilities in the prevention of eating disorders: The introduction of positive body image measures. Body Image, 14, 146-157. doi: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. doi:10.1016/j.bodyim.2016.04.077

Rosenberg, M. (1965). Society and the adolescent self-image. Princeton, NJ: Princeton University Press.

Rudiger, J. A., Cash, T. F., Roehrig, M., & Thompson, J. K. (2007). Day-to-day body-image states: Prospective predictors of intra-individual level and variability. *Body Image*, 4, 1-9. doi:10.1016/j.bodyim.2006.11.004

Sandoz, E. K., Wilson, K. G., Merwin, R. M., & Kellum, K. K. (2013). Assessment of body image flexibility: The Body Image-Acceptance and Action Questionnaire. *Journal of Contextual and Behavioral Science*, 2, 39-48. doi:10.1016/j.jcbs.2013.03.002

Schuman, H., & Presser, S. (1996). Questions and answers in attitude surveys: Experiments on question form, wording, and context. Thousand Oaks, CA: Sage.

Shepperd, J. A., Carroll, P., Grace, J., & Terry, M. (2002).

Exploring the causes of comparative optimism. *Psychologica Belgica*, 42, 65-98.

Smolak, L., & Thompson, J. K. (Eds.) (2009). *Body image, eating disorders, and obesity in youth: Assessment, prevention, and treatment* (2<sup>nd</sup> ed.). Washington, DC: American Psychological Association. doi:10.1037/11860-000

Stanhope, C. (2013). Beauty and the beast: Can life drawing support female student in challenging media imagery? *International Journal of Arts and Design Education*, 32, 352-361. doi:10.1111/j.1467-8070.2013.12030.x

Swami, V. (2016). Illustrating the body: Cross-sectional and prospective investigations of the impact of life drawing sessions on body image. *Psychiatry Research*, *235*, 128-132. doi:10.1016/j.psychres.2015.11.034

Swami, V. (2017). Sketching people: Prospective investigations of the impact of life drawing on body image. *Body Image*, *20*, 65-73. doi:10.1016/j.bodyim.2016.12.011

Swami, V., Barron, D., Weis, L., & Furnham, A. (2016). Bodies in nature: Associations between exposure to nature, connectedness to nature, and body image in U.S. adults. *Body Image*, 18, 153-161. doi:10.1016/j.bodyim.2016.07.002

Swami, V., & Harris, A. S. (2012). Dancing toward positive body image? Examining body-related constructs with ballet and contemporary dancers at different levels. *American Journal of Dance Therapy*, 34, 39-52. doi:10.1007/s10465-012-9129-7

Swami, V., & Knowles, V. (2013). Mental health literacy of negative body image: Symptom recognition and beliefs about body image in British community sample. *International Journal of Culture and Mental Health*, 7, 199-215. doi:10.1080/1752863.2013.769611

Swami, V., & Tovée, M. J. (2009). A comparison of actual-ideal

weight discrepancy, body appreciation, and media influence between street-dancers and non-dancers. *Body Image*, 6, 304-307. doi:10.1016/j.bodyim.2009.07.006

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. doi:10.1007/s11199-014-0408-2

Tylka, T. L., & Wood-Barcalow, N. L. (2015a). What is and what is not positive body image? Conceptual foundations and construct definition. *Body Image*, *14*, 118129. doi:10.1016/j.bodyim.2015.04.001

Tylka, T. L., & Wood-Barcalow, N. L. (2015b). The Body Appreciation Scale-2: Item refinement and psychometric evaluation. *Body Image*, *12*, 53-67. doi: 10.1016/j.bodyim.2014.09.006

Webb, J. B., Wood-Barcalow, N. L., & Tylka, T. L. (2015). Assessing positive body image: Contemporary approaches and future directions. *Body Image*, *14*, 130-145. doi:10.1016/j.bodyim.2015.03.010

Table 1. Open-ended questions used following the final life drawing session.

Question 1	What aspects of the life drawing session did you enjoy or like?
Question 2	Were there any aspects of the sessions you did not enjoy or like?
Question 3	What impact has attending the life drawing sessions had on how you feel, view, or think about your own body?
Question 4	What impact has attending the life drawing sessions had on how you feel in general (e.g., your mood or well-being)?

Question 5	What impact has attending the life drawing sessions had on how you feel, view, or think about other people?
Question 6	Do you think that participating in life drawing sessions can help improve a person's body image? If so, how? If not, why not?
Question 7	Would you recommend life drawing to your friends and family? What benefits do you think they might experience?
Question 8	We are interested in finding out how taking part in life drawing can help improve body image in young people. Is there anything you would change in the life drawing sessions you attended to make them more effective in improving one's body image?
Question 9	Is there anything else you would like to add?

Note. Instructions provided to participants: "This questionnaire is about your experiences taking part in life drawing sessions over the past several weeks. Please answer the questions below in your own words. For each of your answers, please provide as much detail as possible, including examples."

Table 2. Descriptive Statistics for All Variables and the Results of Bonferroni-Corrected Paired-Samples t-Tests

Variable	Scale range	Pre-Inte	rvention	Post-Inte	ervention	t	pª	d <sup>b</sup>
		М	SD	М	SD			

Body appreciation	1-5	2.75	0.57	3.81	0.58	4.91	< .001	1.90
Body image flexibility	1-7	2.74	1.13	4.30	1.00	3.38	.005	1.65
Body pride	1-5	2.31	0.56	3.39	0.74	4.98	< .001	1.20
Self-evaluative salience	1-5	3.48	0.56	2.95	0.58	3.38	.005	0.95
Motivational salience	1-5	3.48	0.63	3.61	0.43	1.15	.271	0.36
Self-esteem	1-4	2.45	0.63	2.70	0.66	2.36	.034	0.38

Note.  ${}^{\text{a}}$ Bonferroni-corrected so that p = .007;  ${}^{\text{b}}$ Dependence-corrected.

Table 3. Percentage of participants who reported each aspect of enjoyment or dislike of the life drawing sessions.

Code	Number and Percentage	Example
	Liked/	Enjoyed
Skill and technique advancement	14 (100%)	I really liked being able to learn new skills and drawing techniques — I feel I have improved as an artist.
Unique experience	8 (57%)	I enjoyed the opportunity to do something I would not have chosen to do on my own.

Group setting with friends	4 (29%)	The fact that we weren't with a group of strangers made the experience more comfortable.
	Disliked/Di	d not enjoy
Discomfort at nudity	10 (71%)	Well, it was initially very uncomfortable to watch a stranger get undressed and model intimate parts of their bodies.
Discomfort at model positioning	8 (57%)	Some of the positions were compromising; they showed too much of the body.
Dislike of fast drawing	7 (50%)	I did not enjoy the limited time for each drawing — it was too stressful a time frame to study the figure to our full ability.
Group setting encouraging improper behaviour	4 (29%)	It was really hard to not react to others' reactions around me, especially when they weren't being adults about the whole situation.
Scheduling conflicts	1 (7%)	I missed out on my school lessons, so I had lots to catch up on — it would have been better if the classes were not during school hours.
No aspect disliked	1 (7%)	I enjoyed everything about this experience.

Table 4. Percentage of participants who reported each aspect of impact of life drawing sessions on their body image or well-being generally.

Code	Number and Percentage	Example
No impact	12 (86%)	I don't think life drawing had any effect at all on how I view or think about my body.
Greater body pride	2 (14%)	I feel prouder about how I look now than I did before — seeing how proud the models were made me realise that you shouldn't be ashamed of your own body.
Greater confidence	1 (7%)	The confidence of the people who modelled for us made me feel more confident about my own self.

Table 5. Percentage of participants who reported each aspect of impact on perceptions of other people.

Code	Number and Percentage	Example
Greater respect and acceptance of others	8 (57%)	I feel I'm now more accepting and respectful of what others choose do with their bodies, whereas before I was maybe overly judgemental.
Acceptance of body diversity	6 (43%)	It's made me think that everyone is different in certain ways — we come in all shapes and sizes and there isn't just one "right" body.
People have different traits	4 (29%)	I used to think that we are basically the same, once you remove all the layers — but now I feel like people can be so different in all kinds of different ways like their personality or confidence.
No impact	5 (36%)	I don't think it has changed anything — I didn't judge people on their looks before and I still won't now.

Table 6. Percentage of participants who reported each aspect

of the benefits of life drawing for other people.

Code	Number and Percentage	Example
Developing ideas of "real" bodies	8 (57%)	Life drawing stops your brain from making assumptions about what a body should look like and it pushes you to accept what bodies really look like.
Body confidence	8 (57%)	It can make you feel more confident about your body; seeing models who are confident will challenge you to think about your own body in the same way.
Self-acceptance	8 (57%)	I think life drawing can teach people that their flaws or what they see as flaws are cool quirks that make them more interesting.
Challenging media ideals	7 (50%)	In a way, I think it may help improve someone's body image because it'll make them think, "There's no such thing as a perfect body" like you would see in fashion magazines.

Skill development	4 (29%)	If a person is interested in art and design, it would definitely help them to improve their ability to draw in different mediums.
Not judging others	4 (29%)	Participating in life drawing will definitely teach people not to automatically judge others.
Inspiration to change	2 (14%)	I think they can help people find inspiration in their lives — I don't mean just in terms of their body image, but all sorts of other things like seeing beauty in everyday life or just wanting to make a change for the better.
Developing a sense of individuality	2 (14%)	Participating in life drawing sessions will help people understand that not everyone is the same, which will make them realise they are unique and individual.
No benefit	2 (14%)	The experience won't change much — I don't think there's really anything to gain.

Table 7. Percentage of participants who reported each recommendation for practitioners wishing to use life drawing to improve body image.

Code	Number and Percentage	Example
Model diversity	12 (86%)	The classes should have as many different models as possible (in terms of heights and weights and backgrounds), as this would help us get used to the idea of what normal bodies look like.
Greater frequency of sessions	10 (71%)	I think, to get the maximum benefit in terms of self-love, it should have been once a fortnight or every week.
Creating a safe space	7 (50%)	If people in the group are childish or disrespectful, it can cause anxiety — so, in general I would try and encourage everyone to be more respectful and mature.
Starting earlier	2 (14%)	I would offer the classes a lot earlier so that young people can improve their image of themselves for the future before they are at too much risk.

Venue	2 (14%)	Don't have it at school because everyone else knows what you've been doing and they have all these childish questions when you finish, which I didn't feel like answering.
Opportunity to talk to friends	1 (7%)	I would like to talk to my friends during the class to feel more comfortable and enjoy myself — maybe we could have a few minutes to talk to each other rather than sit uncomfortably in silence.

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