

Running head: EVALUATION OF *CINDERELLA*

Promoting Positive Body Image in Children Through Theatre: An Evaluation of  
*Cinderella: the AWESOME Truth*

Viren Swami<sup>1-2</sup>, Sarah Punshon<sup>3</sup>, & Toni-Dee Paul<sup>3</sup>

<sup>1</sup>School of Psychology and Sport Science, Anglia Ruskin University, Cambridge, United  
Kingdom

<sup>2</sup>Centre for Psychological Medicine, Perdana University, Kuala Lumpur, Malaysia

<sup>3</sup>One Tenth Human, Lancaster, United Kingdom

**Acknowledgements**

This research was supported by an Arts Council/National Lottery grant made to One Tenth  
Human (ACPG-00399835)

Address correspondence to: Prof. Viren Swami, School of Psychology and Sport Science,  
Anglia Ruskin University, East Road, Cambridge, Cambridgeshire CB1 1PT, United  
Kingdom. Email: [viren.swami@aru.ac.uk](mailto:viren.swami@aru.ac.uk).

### Abstract

*Cinderella: the AWESOME Truth* is a children's theatrical production developed with the aim of promoting positive body image and improved self-image. As part of the production's initial run at the Polka Theatre in London, United Kingdom, we conducted an evaluation of the show's efficacy at improving state positive body image and self-image. Using a single-arm design, we recruited 54 girls and 45 boys between the ages of 5 and 9 years attending a performance of *Cinderella* with their parents/caregivers, and asked them to complete an adapted measure of state body appreciation at pre- and post-attendance. Participants were also asked to complete open-ended questions about their own uniqueness and awesomeness – two central themes of the production – at both time-points, and their enjoyment of the show at post-attendance. Results indicated that attending the performance improved state body appreciation, self-perceived uniqueness, and self-perceived awesomeness, with small-to-moderate effects. These results were consistent across girls and boys, and enjoyment of the performance was near universally high. Despite limitations – including the lack of a control group and the constrained assessment period – these results suggest that tailored children's theatre may be a viable method of promoting positive body image in young age groups.

**Keywords:** Positive body image; Children; Theatre; Body appreciation; Uniqueness; Cinderella

## 1. Introduction

Although adolescence is widely recognised as an important developmental period for experiencing and negotiating body image concerns (Maes et al., 2021; Markey, 2010; Wertheim & Paxton, 2011), it is also clear that body image develops in childhood (Grogan, 2021). For instance, research suggests that, by age five, children have begun to internalise societal standards of appearance (Damiano et al., 2015) and that body dissatisfaction begins to manifest in both girls and boys from age six onwards (Nichols et al., 2018; Schuck et al., 2018; Tatangelo et al., 2016). In turn, body and appearance dissatisfaction is reliably associated with a multitude of detrimental health and psychological outcomes, including symptoms of depression, low self-esteem, symptoms of disordered eating, and decreased physical activity (Bornioli et al., 2019; Neumark-Sztainer et al., 2006; Paxton et al., 2006). As such, childhood is increasingly recognised as a critical period in shaping body image, with experiences of body and appearance dissatisfaction carried into adolescence and emerging adulthood (Bufferd et al., 2022; Frisén et al., 2015).

Despite the weight of this evidence, however, it should not be assumed that childhood experiences of body image are uniform (i.e., that all children experience similar developmental trajectories in relation to their body images) and irrevocably detrimental (Ricciardelli et al., 2018). Indeed, emerging research has suggested that the period between childhood and early adolescence offers important opportunities not only to overcome experiences of negative body image, but also to develop positive body image (Holmqvist Gattario & Frisén, 2019; Poulter & Treharne, 2021). *Positive body image* here broadly refers to “an overarching love and respect for the body” (Tylka, 2018, p. 9) that is distinct from, and not merely the absence of, negative body image. Further, positive body image is a multidimensional construct (Tylka, 2018), with some research suggesting that *body appreciation* (i.e., accepting and respecting the body, while rejecting unrealistic appearance

ideals; Tylka & Wood-Barcalow, 2015) and *functionality appreciation* (i.e., appreciation for what one's body can do and is capable of doing; Alleva et al., 2017) are central facets of the overall construct (Swami et al., 2020). Experiences of body appreciation and functionality appreciation begin developing early in life (e.g., Frisén & Holmqvist, 2010; Holmqvist & Frisén, 2012) and, as in adults, are associated with improved body-related and emotional well-being in younger age groups (e.g., Halliwell et al., 2017; Sahlan et al., 2022).

Unsurprisingly, scholars have called for the development and prioritisation of interventions aimed at promoting positive body image in childhood (Bray et al., 2018; Daniels & Roberts, 2018). School-based body image interventions have been touted as particularly useful, given that they can target a large number of children and can be embedded within existing curricula (Yager, 2019). A number of such school-based interventions now exist in the United Kingdom (UK) and Scandinavia, with evaluations showing that they are effective at promoting healthier body esteem, body satisfaction, and embodiment in children (e.g., Bird et al., 2013; Damiano et al., 2018; Halliwell et al., 2016; Sundgot-Borgen et al., 2020). Importantly, however, the focus of these interventions has typically been on reducing negative body image (e.g., avoiding appearance conversations and body comparisons), rather than promoting positive body image *per se*. Moreover, their uptake in the UK at least has been limited (Diedrichs et al., 2016) and, despite guidance being developed to assist the teaching of body image to children and adolescents in schools (Personal, Social, and Health Education Association, 2018), the framework is not currently embedded within compulsory teaching curricula and training for teachers remains limited (Bray et al., 2018).

Other interventionist programmes – such as Confident Body, Confident Child (Hart et al., 2016) – are family-focused, offering parenting resources and strategies aimed at promoting healthy eating and positive body image in young children (for a review, see

Carbonneau et al., 2021). Evaluations of such programmes have shown that they are effective at reducing body dissatisfaction in children (Hill et al., 2020), though evaluations focused on indices of positive body image specifically are currently lacking. Other standalone interventions with a more explicit focus on the promotion of positive body image include a brief yoga intervention (Halliwell et al., 2018), an educational board game (Guest et al., 2021), a brief animated film (Matheson et al., 2020), and the use of children's picture books designed to promote positive body image (Dohnt & Tiggemann, 2008; see also Itzoe & Frasso, 2021). However, evaluations of these interventions have suggested that they may not produce improvements in positive body image beyond that obtained by control groups (Guest et al., 2021; Halliwell et al., 2018; Matheson et al., 2020) or that any improvement is limited to the immediate term (Dohnt & Tiggemann, 2008).

Given these mixed results, it may be useful to consider other interventionist methods for promoting positive body image in children. One such method may involve arts-based practices, such as theatre (i.e., “live performances” that involve music, dance, voice, acting, and singing; Staricoff et al., 2001). While engagement with the creative arts in general has been widely shown to improve psychological health and well-being across all age groups (for a review, see Fancourt & Finn, 2019), theatre may offer hitherto unexplored opportunities to engage children in relation to their body image. For instance, existing research has shown that attendance at theatrical performances is effective at promoting psychological well-being, social engagement, belonging, and flow (Meeks et al., 2018). For children, in particular, watching tailored theatrical performances can provide profound educational, emotional, and expressive benefits (Furman, 2000; Maguire & Schuitema, 2012; Reason, 2010; Rosenberg & Epstein, 1990), while also serving as a medium for effective teaching, instruction, and information transmission (Eluyefa, 2017). That is, children's theatre is able to stimulate the

imagination of children and provide them with new skills and creativity to face, understand, and challenge the world around them (Eluyefa, 2017; Gardner, 2013).

To date, however, we are not aware of evaluations of any children's theatrical productions aimed at promoting positive body image and self-image. One production that was developed and produced with these aims in mind is *Cinderella: the AWESOME Truth* (Punshon et al., 2021). Specifically, this production was developed with the aim of (among other things) raising awareness about body shaming and its deleterious effects, managing appearance expectations and anxieties, highlighting the ways in which social media can negatively affect body image, and promoting body and functionality appreciation. As part of the production's initial run at the Polka Theatre in London (UK) between November 2021 and January 2022, we conducted an evaluation of the effectiveness of *Cinderella* at promoting positive body image in children. More specifically, we examined the effectiveness of the production in delivering immediate changes in body appreciation (i.e., state changes in an index of positive body image) and recognition of one's uniqueness and awesomeness. We hypothesised that attending and watching *Cinderella* would result in improved state body appreciation, as well as greater feelings of uniqueness and awesomeness. Further, we expected these effects to be consistent across girls and boys.

## 2. Method

### 2.1. Design and Production

**2.1.1. Study design.** The study utilised a single-arm (i.e., no control group) pre- and post-attendance methodology to assess changes in state positive body image and self-perceived uniqueness and awesomeness in children attending performances of *Cinderella: the AWESOME Truth*. Parents/caregivers were asked to provide demographic information about themselves and their children, whereas at pre- and post-attendance children completed

a paper-and-pencil survey that included a measure of state body appreciation, self-uniqueness, and awesomeness.

**2.1.2. Production.** *Cinderella: the AWESOME Truth* (Punshon et al., 2021) is a live theatrical performance that retells the classic folk tale (cf. Zipes, 2001) for a contemporary young audience. Research and development for *Cinderella* began in 2019 with discussions between a theatre-maker and two scientists with knowledge and expertise on the promotion of positive body image in children. This, in turn, facilitated iterative writing and composing periods involving the theatre-maker, a composer, and several devisors. In Autumn 2019, twelve purpose-designed workshop sessions – led by a diverse team consisting of facilitators of varying races, body sizes, and gender identities – were held with 211 primary schoolchildren aged 7 to 9 years, during which the development team facilitated discussions around children’s understanding of the classic Cinderella story and its characters, as well as what the characters were like both on the outside and inside. Additional discussions were centred around aspects of beauty, appearance, bodies, and music preferences. During these workshops, children were exposed to devisors of very different body shapes and ethnicities in character as Cinderella or Prince Charming, and invited to imagine and craft stories about what a Cinderella that looked like the devisors might be like, would like doing, and would be good at.

The information generated from the workshops was expected in some ways (e.g., Cinderella was typically described as blonde and slim) and surprising in other ways (e.g., “mice” were mentioned more frequently as characters in the traditional tale than the Ugly Sisters). This, in turn, informed and shaped the development of a first draft of Act One of the production, as well as two songs. In January and February 2020, the draft was presented script-in-hand to schoolchildren, teachers, parents/caregivers, and a scientist involved in the initial research-and-development phase at venues in Lancaster and Manchester, UK. Based

on feedback from these events, the draft was revised (e.g., tightening sections where audience attention had seemed to dip). Additionally, participants were asked to suggest what would happen in the second half of the show, and their suggestions helped the theatre-makers to complete the story. Production was delayed at this point due to the COVID-19 pandemic, but resumed in May 2021 with further development workshops. Rehearsals took place between October and November 2021, before the show opened at the Polka Theatre in London, UK, in November (One Tenth Human, 2021). Based on the Polka Theatre's box office report, a total of 8,628 tickets were sold for *Cinderella*, which includes a substantial number of free and discounted tickets.

*Cinderella: the AWESOME Truth* was written and developed with the aim of helping children develop positive body image and self-image in mind. The narrative is centred around two stepsisters – Cindy and Ella – who look different and do not get along: Cindy likes to dress up and wants to be rich, whereas Ella is more interested in boxing. Actors were deliberately cast with very different body shapes, with Ella in particular not conforming to conventional beauty ideals. To ensure that boys' body image concerns were also raised, the developers created the character of Prince Francis (who does not conform to conventional notions of Prince Charming, being small, shy, and quiet) and Dandini (the prince's best friend, who is non-binary and defies gender stereotyping). The Fairy Godmother is transformed in this retelling into puppets – inspired by emojis, filters, and YouTube tutorials – who attempt to persuade the main characters to “like and subscribe” in return for appearance transformations. Central issues raised in this version of *Cinderella* include body shaming and its effects, managing appearance expectations and anxieties, the impact of social media on body image, and the value of friendships in promoting healthier body attitudes and improved self-esteem. Through the performance, children learn that what makes them



“awesome” is what they and their bodies can do (e.g., being kind, curious, and brave, or doing fun and enjoyable things), not what they look like (Punshon et al., 2021).<sup>6</sup>

## 2.2. Participants

**2.2.1. Power calculation.** A power calculation conducted using G\*Power 3 (Faul et al., 2007) indicated that the minimum sample size required to detect a small effect size with  $\alpha = .05$  and 95% power was 45 girls and 45 boys.

**2.2.2. Sample.** Participants of the study were children attending performances of *Cinderella* at the Polka Theatre in London, UK. After excluding participants who did not return post-attendance surveys ( $n = 9$ ), the final sample consisted of 54 girls and 45 boys who ranged in age from 5 to 9 years ( $M = 7.08$ ,  $SD = 1.53$ ). Most participants were White/White British (68.7%), while 11.1% were Asian/Asian British, 4.0% were Black/African/Caribbean/Black British, and 16.2% were of mixed ancestry.

**2.2.3. Parents/caregivers.** Parents/caregivers who provided their demographic details were cisgender women (79.8%) and men (20.2%), who ranged in age from 25 to 53 years ( $M = 38.28$ ,  $SD = 6.53$ ). This sample was generally highly educated, with 19.2% having completed secondary education, 3.0% in full-time education, 35.4% having an undergraduate degree, and 42.4% having a postgraduate degree. The majority of parents/caregivers were White/White British (74.7%), while 12.1% were Asian/Asian British, 6.1% were Black/African/Caribbean/Black British, and 7.1% were of mixed ancestry.

## 2.3. Measures

**2.3.1. State body appreciation.** To measure state body appreciation pre- and post-attendance, we adapted three items from two existing measures, namely the Body Appreciation Scale-2 for Children (BAS-2C; Halliwell et al., 2017) and the state version of the BAS-2 (Homan, 2016). Specifically, we first selected the three items with highest item-factor loadings from Halliwell et al. (2017) – “I feel good about my body”, “I feel love for

my body”, and “I am comfortable in my body” – before adding the stem “Right now...” to each item, as per Homan (2016). The decision to adapt the two existing measures in this way was made because no existing measure of state positive body image has been validated for use with children, whereas the decision to use only three of the ten BAS-2 items was made for practical reasons (i.e., to reduce cognitive load and time pressure for completing the survey). Furthermore, because we were concerned that children may experience difficulties responding to the original 5-point scale, we used an adapted 3-point response option (☹ = *no*, 😐 = *maybe*, 😊 = *yes*) that has been validated for use with children (Alan & Kabasakal, 2020). Both the BAS-2C and the state version of the BAS-2 evidence adequate psychometric properties (Halliwell et al., 2017; Homan, 2016), but because of our adaptation, we conducted an evaluation of score dimensionality using exploratory factor analysis prior to our main analyses (see Section 3.2.).

**2.3.2. Self-uniqueness.** Because one of the messages of *Cinderella* is to encourage children to recognise their own uniqueness and special talents, children were asked two open-ended questions that were directly linked to the themes of the production: “What is AWESOME about you?” and “What is UNIQUE about you?” (capitalisations in original). These items were adapted from Dohnt and Tiggemann (2008) and participants were allowed to respond with as many answers as they wished. As per our ethics approval and consistent with Dohnt and Tiggemann (2008), only the number of responses listed by participants for each item was used in analyses.

**2.3.3. Demographic items.** The pre-attendance survey asked the parents/caregivers of participants to provide information about their own gender identity, sex at birth, age, ethnicity/race, and highest educational qualification. They were also asked to provide information about their child/children, namely their gender identity, age, and ethnicity/race.

**2.3.4. Post-attendance items.** The post-attendance survey also included one item about perceived enjoyment of the production (“Did you enjoy the show?” with the same response options as described in Section 2.3.1) and two open-ended items (“What was your favourite part of the show?” and “What did you learn from the show?”).

## **2.4. Procedures**

Ethics approval was obtained from the Faculty Research Ethics Panel at the first author’s institution (approval code: FSE/FREP/21/1009). *Cinderella* ran at the Polka Theatre between November 2021 and January 2022; however, due to COVID-19-related issues, performances were paused for three weeks in December 2021. Participants were recruited on family days at the theatre (i.e., when the performance was open to members of the public and when we expected potential participants to be attending with their parents/caregivers) in November 2021 and January 2022. With permission from the Polka Theatre, researchers or briefed front-of-house staff invited parents/caregivers to take part in a survey as they were entering the theatre: they were verbally given information about the project and asked if they met inclusion criteria (i.e., attending the performance with a child between the ages of 5 and 9 years, which is the target audience of the performance). If they agreed, they were given further, written information about the project and asked to provide written informed consent for themselves and their child/children to take part.

Parents/caregivers who agreed to take part in the study were given a survey package consisting of a pre- and post-attendance survey. The pre-attendance survey included demographic items presented on a single page, which parents/caregivers were asked to complete for themselves and on behalf of their children. It also included a 1-page survey for their child/children to complete, either on their own or with parental/caregiver supervision; this survey included the two open-ended items described in Section 2.3.2 above, interspersed by the three body appreciation items described in Section 2.3.1. Parents/caregivers attending

with multiple eligible children were asked to complete duplicate demographics for themselves. Parents/caregivers were asked not to give sight of the post-attendance survey to their children until after the show was over. The post-attendance survey included the same items as the pre-attendance survey and presented in the same order, as well the post-attendance items described in Section 2.3.4. We delegated completion of the surveys to parents/caregivers in this way to facilitate recruitment and completion in a busy setting (i.e., given the naturalistic design, it was not deemed feasible to re-recruit participants post-attendance) and to manage expectations. Parents/caregivers were asked to return completed surveys as they were leaving the theatre. The survey package also included written debriefing information, which described the project and its objectives, and also provided resources for support for parents/caregivers to have positive conversations about body image with their children, as per the recommendations of Damiano et al. (2020). All participants took part on a voluntary basis and children received a sticker upon return of both surveys. All surveys were anonymous and researcher-generated codes were used to link pre- and post-attendance surveys until data were digitally stored.

## **2.5. Analytic Strategy**

**2.5.1. Data screening and treatment.** The only missing quantitative data were seven entries for the enjoyment item, so these were replaced using the mean replacement method.

**2.5.2. Factor analysis.** Because we adapted both the state BAS-2 and BAS-2C for use in the present study, we initially assessed the factorial validity of scores. To do so, we subjected pre- and post-attendance body appreciation scores from the total sample to a principal-axis exploratory factor analysis (EFA). Data factorability was assessed using the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy (which should ideally be  $\geq .80$ ) and Bartlett's test of sphericity (which should be significant) (Hair et al., 2009). Principal-axis factoring was used for the EFAs as it yields results similar to commonly used maximum

likelihood estimation without assuming multivariate normality (Fabrigar et al., 1999; Goretzko et al., 2021). Given the expectation of a single orthogonal factor, a quartimax rotation was applied (Pedhazur & Schmelkin, 1991). Items were retained if they had communality loadings  $> .40$ , item-factor loadings  $> .50$ , and high inter-item correlations as indicated by the anti-image correlation matrix (Tabachnick & Fidell, 2019). The degree of factor similarity across girls and boys was assessed using Tucker's (1951) congruence coefficient, with values between  $.85$  and  $.94$  corresponding to fair similarity across groups and values  $\geq .95$  suggesting that factor structures can be considered equal across groups (Lorenzo-Seva & ten Berge, 2006).

**2.5.3. Hypothesis-testing.** To test the study hypothesis that attending *Cinderella* would improve state body appreciation scores, we conducted a  $2 \times 2$  mixed analysis of variance (ANOVA), with Testing Session (pre- versus post-attendance) included as a repeated-measures factor and participant Gender (girls versus boys) included as a between-groups factor. For exploratory purposes, we repeated this analysis with participant ethnicity (coded as 1 = White, 2 = Black, Asian, and mixed ethnicity), parent ethnicity (coded as 1 = White, 2 = Black, Asian, and mixed ethnicity), and parental education as between-groups factors, respectively. To assess the impact of participant age, we computed bivariate correlations between age and state body appreciation scores at pre-attendance and post-attendance, as well as the difference between pre- and post-attendance scores. The same set of main and exploratory analyses were then repeated with the number of responses to the questions "What is AWESOME about you?" and "What is UNIQUE about you?", respectively, included as the dependent variables.

**2.5.4. Open-ended responses.** Only 46 participants returned responses to the question about their favourite part of the show and only 44 returned responses to the question about what they learned from the show, so these data were only analysed preliminarily. To

code these data, we use content coding analysis, which allows for the development of a coding scheme through comparison of participant responses to categories (Neuendorf, 2002). The first author began by reviewing the responses several times and generating a coding scheme in consultation with a researcher unaffiliated with the study. New codes were generated for each question when any text did not fit with existing categories and analysis proceeded until all responses 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) and multiple codes were generated when participants provided more than one response to a question. Examples of each coded were discussed to develop labels and conceptual descriptions that summarised the meaning of each label. Next, the first author recoded the data in accordance with the final coding structure. Finally, an independent coder analysed the responses and labelled each response according to the identified codes. Inter-rater agreement between the first author and the independent coder, as measured using Cohen's  $\kappa$ , was substantive ( $\kappa = .96$ ; Krippendorff, 1980).

### 3. Results

#### 3.2. Factor Analysis of State Body Appreciation Scores

Bartlett's test of sphericity,  $\chi^2(3) = 83.11, p < .001$ , and the Kaiser-Meyer-Olkin measure of sampling adequacy (.80) indicated that the three items used to measure state body appreciation had adequate common variance for EFA. The results indicated that there was a single factor with an  $\lambda$  of 2.06, which explained 68.7% of the extracted variance. All three items had good item-factor loadings ( $\geq .78$ ), so we considered scores to be unidimensional. Tucker's congruence coefficient metric (.99) indicated that this factor structure was identical across girls and boys. We then repeated this analysis for post-attendance scores and obtained very similar results (omitted here for brevity), with item-factor loadings again very high ( $\geq .80$ ). As such, we computed an overall score as the mean of all three items, with higher scores

indicative of greater state body appreciation. Internal consistency, as assessed using McDonald's  $\omega$  was adequate at pre-attendance ( $\omega = .78$ , 95% CI = .68, .84) and post-attendance ( $\omega = .82$ , 95% CI = .74, .87).

### 3.3. Body Appreciation Change

Descriptive statistics are reported in Table 1. The results of the ANOVA indicated that the Testing Session x Gender interaction did not reach significance,  $F(1, 97) = 0.67$ ,  $p = .415$ ,  $\eta_p^2 < .01$ , nor did the main effect of Gender,  $F(1, 97) = 1.97$ ,  $p = .163$ ,  $\eta_p^2 = .02$ . However, the main effect of Testing Session was significant,  $F(1, 97) = 11.83$ ,  $p < .001$ ,  $\eta_p^2 = .11$ , with a small-to-moderate effect and with means scores higher at post-attendance. When this analysis was repeated with participant ethnicity, parent ethnicity, and parental education, respectively, as the between-groups factors, the interaction terms of these variables, as well as their main effects, were consistently non-significant (all  $F_s \leq 0.60$ , all  $p_s \geq .442$ , all  $\eta_p^2 \leq .01$ ). Additionally, participant age was not significantly correlated with state body appreciation scores at pre-attendance,  $r = -.12$ ,  $p = .252$ , post-attendance,  $r = -.07$ ,  $p = .515$ , and the difference in body appreciation between pre- and post-attendance scores,  $r = .03$ ,  $p = .749$ .

### 3.4. Self-Uniqueness and Awesomeness Change

When the number of responses to the question "What is UNIQUE about you?" was included as the dependent variable, we found no significant interaction,  $F(1, 97) = 0.07$ ,  $p = .790$ ,  $\eta_p^2 < .01$ , and no main effect of Gender,  $F(1, 97) = 0.20$ ,  $p = .656$ ,  $\eta_p^2 < .01$ . On the other hand, the main effect of Testing Session was significant,  $F(1, 97) = 9.85$ ,  $p = .004$ ,  $\eta_p^2 = .08$ , with a small-to-moderate effect and a higher number of responses recorded at post-attendance (see Table 1 for descriptive statistics). Similarly, when the number of responses to the question "What is AWESOME about you?" was used as the dependent variable, the ANOVA indicated no significant interaction between Testing Session and Gender,  $F(1, 97) = 0.02$ ,  $p = .886$ ,  $\eta_p^2 < .01$ , and no main effect of Gender,  $F(1, 97) = 0.39$ ,  $p = .536$ ,  $\eta_p^2 < .01$ .

On the other hand, the main effect of Testing Session was significant,  $F(1, 97) = 9.86, p = .002, \eta_p^2 = .09$ , with a small-to-moderate effect and a higher number of responses recorded at post-attendance (see Table 1). All exploratory analyses with both uniqueness and awesomeness ratings returned non-significant effects for the interaction terms and main effects of child ethnicity, parent ethnicity, and parent educational qualifications (all  $F$ s  $\leq 0.80$ , all  $p$ s  $\geq .374$ , all  $\eta_p^2 \leq .01$ ). Additionally, neither uniqueness or awesomeness scores were significant correlated with child age at either pre- or post-attendance (all  $r$ s  $\leq .10$ , all  $p$ s  $\geq .336$ ).

### 3.5. Further Analyses

**3.5.1. Enjoyment ratings.** Of those who provided performance enjoyment ratings ( $n = 92$ ), the majority returned a positive (“Yes”) response (90.2%), whereas 9.8% gave a middling response (“Maybe”), and none returned a negative (“No”) response. Enjoyment ratings (see Table 1 for descriptive statistics) were not significantly associated with body appreciation scores, uniqueness responses, or awesomeness responses at either pre- or post-attendance (all  $r$ s  $\leq .19$ , all  $p$ s  $\geq .057$ ), although this may be reflective of floor effects in enjoyment ratings.

**3.5.2. Open-ended responses.** For the question about participants’ favourite part of the show, there were a total of 49 responses, of which the majority related to one or more character from the performance (44.9%; e.g., “My favourite was Ella”, “The prince and Ella”) and of which the majority (63.6%) mentioned Ella. Other favoured aspects of the performance included the songs (22.4%; “Songs and being able to sing along”), the puppetry (16.3%; e.g., “All the puppets especially Squirrel”), and the ending (12.2%; e.g., “The end when the trolls were crushed”). Two participants (4%) indicated that they enjoyed everything about the performance (e.g., “I loved everything”).



For the question about learning, there were a total of 50 responses, of which 17 (34.0%) related to participants perceiving themselves or everyone to be awesome (e.g., “I am awesome just the way I am”, “Everybody is awesome”). There were 10 (20.0%) responses about the importance of being kind to oneself or others (e.g., “It is important to be kind to others”), whereas other responses related to being beautiful despite appearances (12.0%; e.g., “Everyone is beautiful no matter what they look like”), being proud of oneself (12.0%; “Be proud of who you are”), and being true to oneself (8.0%; e.g., “Be who you are”). A smaller number of responses related to being the best version of oneself (4.0%; e.g., “I will be the awesomest version of me”), body functionality (2.0%; “I can do awesome things with my body like football”), and loving one’s siblings (2.0%; “Always love your sister”). Three (6.0%) responses were unspecific (e.g., “I learned a lot”).

#### **4. Discussion**

In this study, we examined the efficacy of a novel children’s theatrical production – *Cinderella: the AWESOME Truth* – at promoting changes to state body appreciation and self-perceived uniqueness and awesomeness in children. Our results indicated that the production was effective at producing a small-to-moderate improvement in state body appreciation from pre- to post-attendance, an effect that was consistent across participant gender and other demographics (e.g., child age, parent/caregiver educational backgrounds). This result is broadly consistent with evaluations of other interventions designed to promote positive body image in children (e.g., Guest et al., 2021; Halliwell et al., 2018; Matheson et al., 2020) particularly the use of a children’s picture book (Dohnt & Tiggemann, 2008). Additionally, the performance was effective at producing small-to-moderate improvements in self-perceived uniqueness and awesomeness, two central messages of *Cinderella*. Importantly, these improvements were achieved while maintaining near universal enjoyment of the show and delivery of key learning outcomes, as assessed through qualitative responses.

There may be a number of reasons why children's theatre has the potential to promote positive body image. At a broad level of abstraction, attending children's theatre is known to provide educational, emotional, and expressive benefits to audiences (Furman, 2000; Maguire & Schuitema, 2012; Reason, 2010; Rosenberg & Epstein, 1990). In particular, "communication between actors and audience" (Way, 1967, as cited in Mages, 2008, p. 127) is able to effectively stimulate the imagination of children and thus serves as a useful medium for teaching and learning (Eluyefa, 2017; Garnder, 2013). Children's theatre is able to achieve this objective via a range of methods, including "suddenlies" (actions or speech that hold the attention of children), narration or storyline, characters that children are able to connect to, and the use of magic (Bennett, 2005; Grant & Wood, 1997). By actualising dramatic experiences through these techniques, children's theatre is able to perform a pedagogic role, insofar as adult-generated learning objectives are communicated to children in a child-centred, constructivist manner (Mages, 2008); that is, theatre is able to mobilise children's engagement, enthusiasm, and creativity, while promoting their learning and development (Nicolopoulou et al., 2015). Indeed, the cognitive, socio-emotional, and executive function changes occurring during the childhood years facilitates both learning and meaning development through theatrical performances (Susman-Stillman et al., 2018).

Beyond these general benefits of children's theatre, we suggest specific elements of *Cinderella: the AWESOME Truth* may have been pivotal in helping audiences achieve positive body image gains. First, the storyline of the production – developed in consultation with body image scientists – emphasises that what makes children "awesome" is what they and their bodies can do, rather than what they look like; that is, it communicates a key tenet of the positive body image construct (Tylka, 2018). For instance, a central narrative element was the characters describing what is awesome about their (physical and psychological) selves in order to be able to defeat the evil Fairy Godmothers, a task which the audience

assisted through structured audience participation including call-and-response. The theatrical setting made it possible for *Cinderella* to combine elements of fantasy, audience participation, and storytelling, and use experiences that many children will be familiar with (e.g., engagement with social media) to inform comprehension and foster cognitive change. Additionally, the casting ensured that a diverse range of body shapes were on stage and the performance involved actors that young audiences would likely have been able to engage and connect with. This suggestion is supported by analysis of responses to the open-ended questions, where participants frequently highlighted the cast – particularly the character of Ella – as their favourite part of the show. Also important was the finding that the performance improved self-perceptions of uniqueness and awesomeness, which again suggests that key messages of the production were effectively communicated.

It is particularly interesting to note that the improvement in body appreciation was attained across participant gender and other demographics (e.g., child age, parent/caregiver educational backgrounds). Given that previous studies with children have suggested that the efficacy of body image interventions may be limited in boys (e.g., Bird et al., 2013), our findings are particularly noteworthy. There may be a number of reasons for the similar efficacy of *Cinderella: the AWESOME Truth* on boys and girls. First, in developing the production, we specifically involved participants of various gender identities to ensure that diverse experiences and opinions were represented. Second, the production clearly raised boy's body image concerns through the character of Prince Francis, ensuring that *Cinderella* avoids perpetuating stereotypes that boys may be immune from body image concerns. More broadly, these results suggest that theatre productions may be one effective method of improving body image outcomes in boys as much as in girls.

Overall, the present findings are important because they suggest that carefully developed children's theatre productions have the potential to promote positive body image

in young age groups. Although theatre has been previously heralded as a novel means of developing healthier body image cognitions and experiences (Howard, 1995), this is limited to adult theatrical performers, rather than child audiences. Of course, it may not be feasible or practical to reach large audiences through children's theatre given the high production costs and barriers to attendance (e.g., family income; Viviers & Botha, 2019). However, in the UK at least, where children's theatre is thriving (Reason, 2010), there may be sustained opportunities to use theatre to improve body image outcomes. For instance, *Cinderella: the AWESOME Truth* was seen by diverse audience members in the local region because it had been programmed as the Polka Theatre's main-house Christmas show. Given the popularity of Christmas shows, at least in the UK (Harman, 2011), there is clearly potential here to provide theatrical experiences that promote positive body image. Indeed, it may be useful for future theatrical productions aimed at children to consider ways in which body image issues could be raised, alongside greater consideration of production-relevant aspects, such as representing diversity (Schuitema, 2012). It may also be useful to consider the ways in which children's theatre could be utilised within existing pedagogic methods aimed at developing positive body image (e.g., taking children's theatre into schools or making use of drama techniques in classrooms).

#### **4.1. Limitations and Future Directions**

We acknowledge that there are limitations to the present work. First, because of our reliance on a naturalistic design and convenience sample (i.e., recruiting participants as they visited the Polka Theatre), it was not possible to recruit a control group (e.g., a group of participants attending a different theatrical production), which would have allowed us to determine whether the effects reported here are unique to *Cinderella: the AWESOME Truth* or general to any theatrical performance. That is, although it seems unlikely, it may be that attending any children's theatrical performance has a state effect on body image, perhaps

because of vicarious experiences of watching actors perform dramatically with their bodies. Related to the study design (i.e., because of the convenience sample), we cannot be certain that our results would generalise to all children who attended performances of *Cinderella: the AWESOME Truth* or that they would be representative of the broader UK population of children. We also cannot entirely rule out possible hypothesis-guessing, especially as we delegated assistance with survey completion to parents/caregivers.

Another limitation of the present study relates to the instruments that were used to assess positive body image. Because no previous measures of state positive body image have been validated for use in children and because of practical necessities (e.g., reducing the cognitive and time burden on visitors to the theatre), we adapted existing measures of body appreciation for use in the present study. The analyses reported here suggests that our adapted measure is factorially valid and internally reliable, but future work is required to provide further evidence of psychometric validity. Of particular note here, we adapted and used only three items from the BAS-2, which may provide limited conceptual coverage of the body appreciation construct. We also modified the response scale of the BAS-2, using a validated 3-point response option (Alan & Kabasakal, 2020) rather than the original 5-point scale, which may limit comparisons across studies. In future studies, it may also be useful to measure facets of positive body image beyond body appreciation (e.g., functionality appreciation), although doing so would require a suitable measure (e.g., the Functionality Appreciation Scale; Alleva et al., 2017) that has been validated for use in children. Indeed, although one of the objectives of *Cinderella* was to improve functionality appreciation, we did not specifically measure this aspect of positive body image in our study because of the absence of any studies examining the validity of a suitable measure (e.g., the Functionality Appreciation Scale) in children.

Perhaps the most important limitation of the present study is that the effects reported here are limited to state changes in body appreciation. That is, because of the use of a pre- and post-attendance design, we cannot be certain that these effects on state body image as a result of attending *Cinderella: the AWESOME Truth* will necessarily translate into longer-term changes to trait body image. Indeed, given previous evidence that the efficacy of body image interventions aimed at children may be temporally limited to the immediate term (Dohnt & Tiggemann, 2008), longer-term assessments would be useful. Relatedly, given the brevity of the survey package, we cannot determine which specific aspects of *Cinderella*, if any, caused the changes in children's body image. Qualitative research with a sample of audience members may be helpful to better understand how *Cinderella* effected the changes reported here. All this being said, we acknowledge that opportunities to replicate and extend the present work may be limited, as it would require future runs of the production.

#### **4.2. Conclusion**

While acknowledging the limitations above and the limited opportunities for replication, we nevertheless suggest that the present work offers important lessons for body image scholars. First, responding to calls from researchers to develop a wider array of interventions to promote healthier body image in children (Bray et al., 2018; Daniels & Roberts, 2018), we suggest children's theatre may be effective means of promoting positive body image in children, at least in the immediate term. That is, aside from the many benefits that theatre provides for children's psychosocial and emotional development (Susman-Stillman et al., 2018), we suggest that children's theatre may also be effectively used to promote positive body image. Of course, theatrical productions may be more expensive and time-consuming as an interventionist method compared to existing interventions (e.g., Dohnt & Tiggemann, 2008; Guest et al., 2021; Halliwell et al., 2018; Matheson et al., 2020). Nevertheless, there may be scope to use theatrical performances alongside existing

interventions, to make creative use of existing theatre programming, or to embed drama and theatre with a body image focus in school-based curricula.

Second, and more generally, *Cinderella: the AWESOME Truth* is perhaps a useful demonstration of how body image scholars can begin to bridge the chasm between the “two cultures” (Snow, 1959/1998) of science and arts. While such collaborative efforts are beginning to emerge (e.g., Itzoe & Frasso, 2021; Matheson et al., 2020), there remains scope to more strongly connect artists and scientists. Importantly, productions such as *Cinderella* go beyond merely combining scientific and aesthetic values by demonstrating its capacity to connect with and engage the public (the “public” in this context being children, as well as a wide variety of stakeholders including parents/caregivers and teachers) in ways that are mutually benefitting. This may be particularly important given gaps in knowledge about childhood body image among parents/caregivers and a perceived lack of resources to discuss body image issues with children (Hart et al., 2015). For body image scholars, on the other hand, extending such three-way engagement practices may be useful in helping us more fully understand body image issues and how best to promote positive body image in children.

### References

- Alan, Ü., & Kabasakal, K. A. (2020). Effect of number of response options on the psychometric properties of Likert-type scales used with children. *Studies in Educational Evaluation*, 66, 100895. <https://doi.org/10.1016/j.stueduc.2020.100895>
- Alleva, J. M., Tylka, T. L., & Kroon Van Diest, A. M. (2017). The Functionality Appreciation Scale (FAS): Development and psychometric properties in U.S. community women and men. *Body Image*, 23, 28-44. <https://doi.org/10.1016/j.bodyim.2017.07.008>
- Bennett, S. (2005). *Theatre for children and young people*. Aurora Metro Publications.
- Bird, E. L., Halliwell, E., Diedrichs, P. C., & Harcourt, D. (2013). Happy Being Me in the UK: A controlled evaluation of a school-based body image intervention with pre-adolescent children. *Body Image*, 10(3), 326-334. <https://doi.org/10.1016/j.bodyim.2013.02.008>
- Bornioli, A., Lewis-Smith, H., Smith, A., Slater, A., & Bray, I. (2019). Adolescent body dissatisfaction and disordered eating: Predictors of later risky health behaviours. *Social Science and Medicine*, 238, 112458. <https://doi.org/10.1016/j.socscimed.2019.112458>
- Bray, I., Slater, A., Lewis-Smith, H., Bird, E., & Sabey, A. (2018). Promoting positive body image and tackling overweight/obesity in children and adolescents: A combined health psychology and public health approach. *Preventive Medicine*, 116, 219-221. <https://doi.org/10.1016/j.ypmed.2018.08.011>
- Bufferd, S. J., Levinson, C. A., Olino, T. M., Dougherty, L. R., Dyson, M. W., Carlson, G. A., & Klein, D. A. (2022). Temperament and psychopathology in early childhood predict body dissatisfaction and eating disorder symptoms in adolescence. *Behaviour Research and Therapy*. Advance online publication. <https://doi.org/10.1016/j.brat.2022.104039>



- Carbonneau, N., Hamilton, L., & Musher-Eizenman, D. R. (2021). From dieting to delight: Parenting strategies to promote children's positive body image and healthy relationship with food. *Canadian Psychology/Psychologie canadienne*, 62(2), 204-212. <https://doi.org/10.1037/cap0000274>
- Damiano, S. R., McLean, S. A., Nguyen, L., Yager, Z., & Paxton, S. J. (2020). Do we cause harm? Understanding the impact of research with young children about their body image. *Body Image*, 34, 59-66. <https://doi.org/10.1016/j.bodyim.2020.05.008>
- Damiano, S. R., Paxton, S. J., Wertheim, E. H., McLean, S. A., & Gregg, K. J. (2015). Dietary restraint of 5-year-old girls: Associations with internalization of the thin ideal and maternal, media, and peer influence. *International Journal of Eating Disorders*, 48(8), 1166-1169. <https://doi.org/10.1002/eat.22432>
- Damiano, S. R., Yager, Z., McLean, S. A., & Paxton, S. J. (2018). Achieving body confidence for young children: Development and pilot study of a universal teacher-led body image and weight stigma program for early primary school children. *Eating Disorders*, 26(6), 487-504. <https://doi.org/10.1080/10640266.2018.1453630>
- Daniels, E. A., & Roberts, T. A. (2018). Programmatic approaches to cultivating positive body image in youth. In E. A. Daniels, M. M. Gillen, & C. H. Markey (Eds.), *Body positive: Understanding and improving body image in science and practice* (pp. 208-234). Cambridge University Press.
- Diedrichs, P. C., Atkinson, M. J., Garbett, K. M., Williamson, H., Halliwell, E., Rumsey, N., Leckie, G., Sibley, C. G., & Barlow, F. K. (2016). Randomized controlled trial of an online mother-daughter body image and well-being intervention. *Health Psychology*, 35(9), 996-1006. <https://doi.org/10.1037/hea0000361>

- Dohnt, H. K., & Tiggemann, M. (2008). Promoting positive body image in young girls: An evaluation of “*Shapesville*”. *European Eating Disorders Review*, 16(3), 222-233.  
<https://doi.org/10.1002/erv.814>
- Eluyefa, D. (2017). Children’s theatre: A brief pedagogical approach. *Arts Praxis*, 4(1), 79-93.
- Fabrigar, L. R., Wegener, D. T., MacCallum, R. C., & Strahan, E. J. (1999). Evaluating the use of exploratory factor analysis in psychological research. *Psychological Methods*, 4(3), 272-299. <https://doi.org/10.1037/1082-989X.4.3.272>
- Fancourt, D., & Finn, S. (2019). *What is the evidence on the role of the arts in improving health and well-being? A scoping review (Health Evidence Network synthesis report 67)*. World Health Organization Regional Office for Europe.
- Faul, F., Erdfelder, E., Lang, A.-G., & Buchner, A. (2007). G\*Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavior Research Methods*, 39(2), 175-191. <https://doi.org/10.3758/bf3193146>
- Frisén, A., Lunde, C., & Berg, A. I. (2015). Developmental patterns in body esteem from late childhood to young adulthood: A growth curve analysis. *European Journal of Developmental Psychology*, 12, 99-115. <https://doi.org/10.1080/17405629.2014.951033>
- Frisén, A., & Holmqvist, K. (2010). What characterizes early adolescents with a positive body image? A qualitative investigation of Swedish girls and boys. *Body Image*, 7(3), 205-212. <https://doi.org/10.1016/j.bodyim.2010.04.001>
- Furman, L. (2000). In support of drama in early childhood education, again. *Early Childhood Education Journal*, 27(3), 173-178. <https://doi.org/1007/BF02694321>

Gardner, L. (2013, October 23). *Why children's theatre matters*. The Guardian.

<https://www.theguardian.com/stage/theatreblog/2013/oct/23/why-childrens-theatre-matters>

Goretzko, D., Pham, T. T. H., & Bühner, M. (2021). Exploratory factor analysis: Current use, methodological developments and recommendations for good practice. *Current Psychology*, 40, 3510-3521. <https://doi.org/10.1007/s12144-019-00300-2>

Grogan, S. (2021). *Body image: Understanding body dissatisfaction in men, women, and children*. Routledge. <https://doi.org/10.4324/9781003100041>

Guest, E., Jarman, H., Sharratt, N., Williamson, H., White, P., Harcourt, D., Slater, A., & The VTCT Foundation Research Team at the Centre for Appearance Research. (2021). "Everybody's Different: The Appearance Game": A randomised controlled trial evaluating an appearance-related board game intervention with children aged 9-11 years. *Body Image*, 36, 34-44. <https://doi.org/10.1016/j.bodyim.2020.09.010>

Hair, J. F. Jr., Black, W. C., Babin, B. J., & Anderson, R. E. (2009). *Multivariate data analysis* (7<sup>th</sup> ed.). Macmillan.

Halliwell, E., Jarman, H., Tylka, T., & Slater, A. (2017). Adapting the Body Appreciation Scale-2 for children: A psychometric analysis of the BAS-2C. *Body Image*, 21, 97-102. <https://doi.org/10.1016/j.bodyim.2017.03.005>

Halliwell, E., Jarman, H., Tylka, T., & Slater, A. (2018). Evaluating the impact of a brief yoga intervention on preadolescents' body image and mood. *Body Image*, 27, 196-201. <https://doi.org/10.1016/j.bodyim.2018.10.003>

Halliwell, E., Yager, Z., Paraskeva, N., Diedrichs, P. C., Smith, S., & White, P. (2016). Body image in primary schools: A pilot evaluation of a primary school intervention program designed by teachers to improve children's body satisfaction. *Body Image*, 19, 133-141. <https://doi.org/10.1016/j.bodyim.2016.09.002>

- Harman, P. (Ed.) (2011). *A guide to UK theatre for young audiences*. Aurora Metro Press.
- Hart, L. M., Damiano, S. R., & Paxton, S. J. (2016). Confident Body, Confident Child: A randomised controlled trial evaluation of a parenting resource for promoting healthy body image and eating patterns in 2- to 6-year old children. *International Journal of Eating Disorders*, 49(5), 458-472. <https://doi.org/10.1002.eat.22494>
- Hill, K. E., Hart, L. M., & Paxton, S. J. (2020). Confident Body, Confident Child: Outcomes for children of parents receiving a universal parenting program to promote healthful eating patterns and positive body image in their pre-schoolers: An exploratory RCT extension. *International Journal of Environmental Research and Public Health*, 17(3), 891. <https://doi.org/10.3390/ijerph17030891>
- Holmqvist, K., & Frisén, A. (2012). “I bet they aren’t that perfect in reality”: Appearance ideals viewed from the perspective of adolescents with a positive body image. *Body Image*, 9(3), 388-395. <https://doi.org/10.1016/j.bodyim.2012.03.007>
- Holmqvist Gattario, K., & Frisén, A. (2019). From negative to positive body image: Men’s and women’s journeys from early adolescence to emerging adulthood. *Body Image*, 28, 53-65. <https://doi.org/10.1016/j.bodyim.2018.12.002>
- Homan, K. J. (2016). Factor structure and psychometric properties of a state version of the Body Appreciation Scale-2. *Body Image*, 19, 204-207. <https://doi.org/10.1016/j.bodyim.2016.10.004>
- Howard, L. A. (1995). *Boal and theatre of the oppressed: A performance-centered inquiry of eating and body image* [Doctoral dissertation, Louisiana State University and Agricultural and Mechanical College]. ProQuest. <https://www.proquest.com/openview/c03c62209cb90998d7158b6ef24d0c57/1?pq-origsite=gscholar&cbl=18750&diss=y>

Itzoe, M. S. M., & Frasso, R. (2021). *Tiny or tall, mighty or small – music for all!*

Developing an interactive online storybook to promote body positivity in children.

*Health Promotion Practice*, 22(3), 300-303.

<https://doi.org/10.1177/1524839920952404>

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

León, M. P., González-Martí, I., & Contreras-Jordán, O. R. (2021). What do children think of

their perceived and ideal bodies? Understandings of body image at early ages: A mixed study. *International Journal of Environmental Research and Public Health*, 18(9),

4871. <https://doi.org/10.3390/ijerph18094871>

Lorenzo-Seva, U., & ten Berge, J. M. F. (2006). Tucker's congruence coefficient as a meaningful index of factor similarity. *Methodology*, 2, 57-64.

<https://doi.org/10.1027/1614-1881.2.2.57>

Maes, C., Trekels, J., Tylka, T. L., & Vandenbosch, L. (2021). The Positive Body Image

among Adolescents Scale (PBIAS): Conceptualization, development, and psychometric evaluation among adolescents from Belgium. *Body Image*, 38, 270-288.

<https://doi.org/10.1016/j.bodyim.2021.05.004>

Mages, W. K. (2008). Does creative drama promote language development in early childhood? A review of the methods and measures employed in the empirical literature.

*Review of Educational Research*, 78(1), 124-152.

<https://doi.org/10.3102/0034654307313401>

Maguire, T., & Schuitema, K. (2012). *Theatre for young audiences: A critical handbook*.

Trentham Books.

Markey, C. (2010). Invited commentary: Why body image is important to adolescent development. *Journal of Youth and Adolescence*, 39(12), 1387-1391.

<https://doi.org/10.1007/s10964-010-9510-0>

- Matheson, E. L., Lewis-Smith, H., & Diedrichs, P. C. (2020). The effectiveness of brief animated films as a scalable micro-intervention to improve children's body image: A randomised controlled trial. *Body Image*, 35, 142-153.  
<https://doi.org/10.1016/j.bodyim.2020.08.015>
- Meeks, S., Shryock, S. K., & Vandenbroucke, R. J. (2018). Theatre involvement and well-being, age differences, and lessons from long-time subscribers. *The Gerontologist*, 58(2), 278-289. <https://doi.org/10.1093/geront/gnx029>
- Neuendorf, K. A. (2002). *The content analysis guidebook*. Sage.
- Neumark-Sztainer, D., Paxton, S. J., Hannan, P. J., Haines, J., & Story, M. (2006). Does body dissatisfaction matter? Five-year longitudinal associations between body satisfaction and health behaviors in adolescent females and males. *Journal of Adolescent Health*, 39(2), 244-251. <https://doi.org/10.1016/j.jadohealth.2005.12.001>
- Nichols, T. E., Damiano, S. R., Gregg, K., Wertheim, E. H., & Paxton, S. J. (2018). Psychological predictors of body image attitudes and concerns in young children. *Body Image*, 27, 10-20. <https://doi.org/10.1016/j.bodyim.2018.08.005>
- Nicolopoulou, A., Cortina, K. S., Ilgaz, H., Brockmeyer, C., & de Sá, A. B. (2015). Using narrative- and play-based activity to promote low-income preschoolers' oral language, emergent literacy, and social competence. *Early Childhood Research Quarterly*, 31, 147-162. <https://doi.org/10.1016/j.ecresq.2015.01.006>
- One Tenth Human. (2021). *Cinderella: the AWESOME Truth – Final activity report*. Arts Council/National Lottery.
- Paxton, S. J., Neumark-Sztainer, D., Hannan, P. J., & Eisenberg, M. E. (2006). Body dissatisfaction prospectively predicts depressive mood and low self-esteem in adolescent girls and boys. *Journal of Clinical Child and Adolescent Psychology*, 35(4), 539-549. [https://doi.org/10.1207/s15374424jccp4504\\_5](https://doi.org/10.1207/s15374424jccp4504_5)

- Pedhazur, E. J., & Schmelkin, L. P. (1991). *Measurement, design, and analysis: An integrated approach*. Lawrence Erlbaum.
- Personal, Social, and Health Education Association. (2018). *Key standards in teaching about body image*. <https://pshe-association.org.uk/curriculum-and-resources/resources/key-standards-teaching-about-body-image>
- Poulter, P. I., & Treharne, G. J. (2021). "I'm actually pretty happy with how I am": A mixed-methods study of young women with positive body image. *Psychology and Health*, 36(6), 649-668. <https://doi.org/10.1080/08870446.2020.1820008>
- Punshon, S., Hagan, F., & Paul, T.-D. (2021). *Cinderella: the AWESOME truth*. Polka Theatre/One Tenth Human.
- Reason, M. (2010). *The young audience: Exploring and enhancing children's experiences of theatre*. Trentham Books.
- Ricciardelli, L. A., Caltabiano, M. L., & D'Antuono, L. D. (2018). Positive body image by gender and across the lifespan. In E. A. Daniels, M. M. Gillen, & C. H. Markey (Eds.), *Body positive: Understanding and improving body image in science and practice* (pp. 34-58). Cambridge University Press.
- Rosenberg H. S., & Epstein Y. M. (1990). The nature of the theatrical imagination: How theatre going affects children's imagination, and what children say about their theatre experiences. In R. G. Kunzendorf (Ed.), *Mental imagery* (pp. 53-58). Springer. [https://doi.org/10.1007/978-1-4899-2623-4\\_6](https://doi.org/10.1007/978-1-4899-2623-4_6)
- Sahlan, R. N., Todd, J., & Swami, V. (2022). Psychometric properties of Farsi translation of the Functionality Appreciation Scale (FAS) in Iranian adolescents. *Body Image*, 41, 163-171. <https://doi.org/10.1016/j.bodyim.2022.02.011>
- Schuitema, K. (2012). *Children's theatre in the UK: Representing cultural diversity on stage through the practices of interculturalism, multiculturalism, and internationalism*

[Doctoral thesis]. University of Westminster.

<https://core.ac.uk/download/pdf/161121549.pdf>

Snow, C. P. (1959/1998). *The two cultures*. Cambridge University Press.

Staricoff, R.L., Duncan, J., Wright, M., Loppert, S., & Scott, J. (2001). A study of the effects of the visual and performing arts in healthcare. *Hospital Development*, 32, 25-28.

Sundgot-Borgen, C., Stenling, A., Rosenvinge, J. H., Pettersen, G., Friborg, O., Sundgot-Borgen, J., Kolle, E., Klungland Torstveit, M., Svantorp-Tveiten, M. E., & Bratland-Sanda, S. (2020). The Norwegian healthy body image intervention promotes positive embodiment through improved self-esteem. *Body Image*, 35, 84-95.

<https://doi.org/10.1016/j.bodyim.2020.08.014>

Susman-Stillman, A., Englund, M., Webb, C., & Grenell, A. (2018). Reliability and validity of a measure of preschool children's theatre arts skills: The Preschool Theatre Arts Rubric. *Early Childhood Research Quarterly*, 45(4), 249-262.

<https://doi.org/10.1016/j.ecresq.2017.12.001>

Swami, V., Furnham, A., Horne, G., & Stieger, S. (2020). Taking it apart and putting it back together again: Using Item Pool Visualisation to summarise complex data patterns in (positive) body image research. *Body Image*, 34, 155-166.

<https://doi.org/10.1016/j.bodyim.2020.05.004>

Tabachnick, B. G., & Fidell, L. S. (2019). *Using multivariate statistics* (7<sup>th</sup> ed.) Allyn & Bacon.

Tatangelo, G., McCabe, M., Mellor, D., & Mealey, A. (2016). A systematic review of body dissatisfaction and sociocultural messages related to the body among preschool children. *Body Image*, 18, 86-95. <https://doi.org/10.1016/j.bodyim.2016.06.003>

Tucker, L. R. (1951). *A method for synthesis of factor analysis studies* (Personnel Research Section Report No. 984). Department of the Army.



- Tylka, T. L. (2018). Overview of the field of positive body image. In E. A. Daniels, M. M. Gillen, & C. H. Markey (Eds.), *Body positive: Understanding and improving body image in science and practice* (pp. 6-33). Cambridge University Press.
- 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*, 118-129. <https://doi.org/10.1016/j.bodyim.2015.04.001>
- Viviers, P.-A., & Botha, K. (2019). Determining the key factors contributing to children's theatre ticket purchases at Afrikaans arts festivals in South Africa. *South African Theatre Journal, 32*(2), 89-107. <https://doi.org/10.1080/10137548.2019.1640129>
- Wertheim, E. H., & Paxton, S. J. (2011). Body image development in adolescent girls. In T. F. Cash & L. Smolak (Eds.), *Body image: A handbook of science, practice, and prevention* (pp. 76-84). The Guilford Press.
- Wood, D., & Grant, J. (1997). *Theatre for children: A guide to writing, adapting, directing and acting*. Faber and Faber.
- Yager, Z. (2019). Promoting positive body image and embodiment in schools: Past, present, and future. In T. L. Tylka & N. Piran (Eds.), *Handbook of positive body image and embodiment: Constructs, protective factors, and interventions* (pp. 346-359). Oxford University Press. <https://doi.org/10.1093/med-psych/9780190841874.003.0033>
- Zipes, J. (2001). *The great fairy tale: From Straparola and Basile to the Brothers Grimm*. W. W. Norton.

Table 1

*Descriptive Statistics (Means and Standard Deviations in Parentheses) for State Body Appreciation, Number of Self-Uniqueness Responses, and Number of Awesomeness Responses at Pre- and Post-Attendance, and Enjoyment Ratings at Post-Attendance.*

	Possible range	Pre-attendance			Post-attendance		
		Girls	Boys	Total	Girls	Boys	Total
Body appreciation	1 to 3	2.40 (0.44)	2.55 (0.43)	2.46 (0.44)	2.64 (0.45)	2.70 (0.56)	2.66 (0.59)
Uniqueness	Not limited	1.39 (1.25)	1.42 (0.94)	1.40 (1.12)	1.80 (1.02)	1.91 (1.22)	1.85 (1.11)
Awesomeness	Not limited	1.37 (0.96)	1.44 (0.92)	1.40 (0.94)	1.80 (1.02)	1.91 (1.22)	1.85 (1.11)
Enjoyment	1 to 3	-	-	-	2.90 (0.30)	2.90 (0.30)	2.90 (0.30)