1   **Abstract**

2   In the last decade, the body image literature has begun to extend beyond a primary focus on

3   body image disturbances and examine the construct of positive body image. Similarly, "Body

4   positivity" is a growing social media trend that seeks to challenge dominant societal

5   appearance ideals and promote acceptance and appreciation of all bodies and appearances.

6   The present study provides a content analysis of body positive posts on Instagram. A set of

7   640 Instagram posts sampled from popular body positive accounts were coded for physical

8   appearance-related attributes and central themes featured. Results showed that body positive

9   imagery typically depicted a broad range of body sizes and appearances. Additionally, while

10   a proportion of posts were appearance-focused, the majority of posts conveyed messages

11   aligned with theoretical definitions of positive body image. This study clarifies body positive

12   content on Instagram, as well as highlights points of overlap and distinction from academic

13   principles of positive body image and other appearance-focused social media content.

14   Accordingly, the results offer theoretical and practical implications for future research and

15   prevention efforts.

16

1. Introduction

It is well established that exposure to culturally-based beauty ideals in the media is associated with body dissatisfaction, weight concern, thin-ideal internalisation, and disordered eating behaviours in women (Frederick, Daniels, Bates, & Tylka, 2017; Grabe, Ward, & Hyde, 2008; Groesz, Levine, & Murnen, 2002). More recently, people are increasingly turning to *social* media as a dominant source of information about social norms and appearance standards (Bair, Kelly, Serdar, & Mazzeo, 2012). Over 3 billion people use social media worldwide, with 89% of young adults checking their social media accounts at least once per day, and women checking even more frequently (Pew Research Center, 2018). Recent research suggests that, as with traditional media, appearance-focused social media use is positively associated with thin-ideal internalisation, self-objectification, body dissatisfaction, and disordered eating behaviours in women (Cohen, Newton-John, & Slater, 2017, 2018).

1.1. Appearance Ideals on Social Media

Two predominant appearance ideals presented on social media are *thinspiration* (visual or textual images intended to inspire weight loss), and *fitspiration* (motivational images and text designed to inspire people to attain fitness goals). Content analyses of online media depicting *thinspiration* and *fitspiration* have found that these images typically portray scantily-clad women with ultra-thin or thin-athletic bodies in sexually objectifying poses (Carrotte, Prichard, & Lim, 2017; Ghaznavi & Taylor, 2015; Tiggemann & Zaccardo, 2018). Most images contain messages that glorify the thin or thin and toned ideals, as well as promote dietary restraint and exercise for appearance-motivated reasons (Boepple, Ata, Rum, & Thompson, 2016; Simpson & Mazzeo, 2017; Wick & Harriger, 2018). Given that *fitspiration* is designed to motivate exercise and health, one may assume that it is healthier than *thinspiration*. However, Boepple and Thompson (2016) found that *thinspiration* and

42   *fitspiration* online content did not differ on guilt-inducing messages regarding weight or the

43   body, fat stigmatisation, the presence of objectifying phrases, and dieting messages, with

44   88% of *thinspiration* and 80% of *fitspiration* content containing one or more of these

45   messages. It is not surprising then, that acute exposure to such content has been found to

46   increase body dissatisfaction, negative mood, and decrease appearance self-esteem in women

47   (Robinson et al., 2017; Tiggemann & Zaccardo, 2015).

48   **1.2. Body Positivity**

49   In response to the dominant appearance-ideal messages in traditional and social

50   media, there has been growing momentum to reject these narrowly-defined and inaccessible

51   body ideals in favour of a more inclusive and positive conceptualisation of body image. In

52   popular culture, this momentum has been termed the "body positive movement" or "body

53   positivity." This movement stems from the 1960s feminist-grounded fat acceptance

54   movement that emerged in reaction to the rise in anti-fat discourse in Canada and the United

55   States at the time (Afful & Ricciardelli, 2015). The fat acceptance movement aimed to

56   encourage critical debate about societal assumptions of body image and protest

57   discrimination against fat people (Afful & Ricciardelli, 2015). Similarly, body positivity aims

58   to challenge the prevailing thin-ideal messages in the media and foster acceptance and

59   appreciation of bodies of all shapes, sizes, and appearances (Cwynar-Horta, 2016).

60   In recent years, body positivity has become popularised through the photo-based

61   social networking site, Instagram, which has seen a rise in body positive Instagram accounts.

62   A search of the hashtag #bodypositive on Instagram elicits 7,069,114 posts and

63   #bodypositivity shows 2,195,968 posts (Instagram, September 2018). These hashtags

64   accompany a variety of imagery, including "fat" women practicing yoga with captions like

65   "fat girls can be active, fit and fabulous too!", and plus-size fashion bloggers wearing the

66   latest trends previously reserved for thin-ideal runway models, with hashtags like

67   #plussizefashion and #styleissizeless. Such posts intend to increase the visibility and

68   normalisation of otherwise underrepresented bodies in traditional media (Saguy & Ward,

69   2011). Other popular body positive accounts share their journeys from body hatred and/or

70   disordered eating to body acceptance and appreciation. For example, @bodyposipanda, one

71   of the most prominent body positive "influencers"[1] on Instagram, describes herself as a

72   "body positive babe [and] anorexia conqueror." On her Instagram account, she shares her

73   experiences recovering from anorexia nervosa with her 1 million followers and posts

74   messages about accepting one's body as it is, seeing "beauty in the rolls, folds, lumps and

75   curves on your body."

76   Unlike traditional media consumption, social media users are both passive consumers

77   and active creators of content. Social networking sites, like Instagram, have become one of

78   the most dominant and influential mediums to cultivate awareness, foster online communities

79   and advocate for social change at a global level (Kasana, 2014). Accordingly, Instagram

80   offers body positive advocates a global platform to reframe the prevailing discourse on body

81   image, beauty, and health in the media to be more inclusive and affirmative. This has been

82   accompanied by a barrage of media outlets urging readers to follow the top body positive

83   Instagram accounts with headlines like "7 Body-Positive Instagram Accounts To Follow For

84   A Confidence Boost" (Moss, 2017) and "13 Body-Positive Influencers You Should

85   Follow on Instagram" (Williams & Williams, 2017).

86   **1.3. Positive Body Image in Research**

87   This shift towards positive body image has also been reflected in the body image

88   scholarship. In the last decade, the body image literature has begun to embrace a more

---

[1] Influencer is a term used to describe a social media user who has garnered a significant number of followers and has thus established credibility in their specific domain. They therefore have the credibility and reach necessary to influence the behaviour and opinions of a large audience of followers (Halzack, 2016).

89   holistic understanding of body image by moving beyond a singular focus on body image

90   *disturbance* and investigating the concept of *positive* body image (Tylka, 2012, 2018).

91   Positive body image has been defined as an overarching love and respect for the body,

92   consisting of six core components: (1) body appreciation (gratitude for the function, health,

93   and unique features of the body), (2) body acceptance and love (accepting aspects of the body

94   that are inconsistent with idealised media images), (3) conceptualising beauty broadly

95   (perceiving beauty based on a variety of appearances and internal characteristics), (4)

96   adaptive investment in body care[2] (tending to the body's needs through exercise, sleep,

97   hydration etc.), (5) inner positivity (feeling beautiful on the inside which may radiate to the

98   external appearance and behaviour, e.g., kindness, mindfulness), and (6) protective filtering

99   of information (rejecting negative body-related information while accepting positive

100 information) (Tylka, 2012, 2018; Tylka & Wood-Barcalow, 2015b).

101   A growing body of research shows that positive body image is related to greater

102 emotional, psychological, and social well-being, as well as physical health outcomes

103 (Andrew, Tiggemann, & Clark, 2016a, 2016b; Swami, Weis, Barron, & Furnham, 2018;

104 Tylka, 2018). Moreover, research has found associations between positive body image and

105 adaptive behavioural outcomes, including healthier eating patterns in adolescent and adult

106 women (Andrew, Tiggemann, & Clark, 2014; Andrew et al., 2016b; Augustus-Horvath &

107 Tylka, 2011), prosocial behaviour and self-care (Tylka, 2012), increased exercise frequency

108 (Homan & Tylka, 2014), and improved sexual functioning (Satinsky, Reece, Dennis,

109 Sanders, & Bardzell, 2012).

---

[2] This was previously called "adaptive investment in appearance" (Tylka & Wood-Barcalow, 2015b) but for the purpose of ease of interpretation and coding in this study, it will be referred to as "adaptive investment in body care" as recommended by T. L. Tylka (Personal communication, January 15, 2018).

110   Research based on consumer preferences suggests that providing women with greater

111 diversity of appearances in media images and developing social networks that focus on

112 positive, non-appearance focused qualities, are worthwhile avenues to promote positive body

113 image at a macro-level (Paraskeva, Lewis-Smith, & Diedrichs, 2017). Qualitative research

114 has shown that individuals with a positive body image tend to interpret appearance-related

115 information in a body-protective manner, internalising positive information and rejecting or

116 reframing negative information (Holmqvist & Frisén, 2012; Wood-Barcalow, Tylka, &

117 Augustus-Horvath, 2010). Accordingly, body positive Instagram accounts, which purport to

118 offer online communities dedicated to sharing appearance-ideal resistance strategies and

119 fostering appreciation for a wider variety of body appearances, may play an important role in

120 the development and maintenance of positive body image in young women. Therefore, it is

121 important to examine body positivity on social media in order to enrich our understanding of

122 consumer experiences of positive body image, and potentially discover a novel avenue to

123 promote positive body image at a macro-level.

124 **1.4. Potential Negatives of Body Positive Social Media Content**

125   Despite the ostensible benefits of body positive content on social media, some

126 researchers have questioned whether the large number of images of women's bodies and the

127 emphasis on "loving your looks" continues to reinforce, rather than nullify, society's

128 preoccupation with appearance over other attributes (Webb, Vinoski, Bonar, Davies, & Etzel,

129 2017a). Others are critical that, aside from portraying higher weight individuals, influential

130 body positive accounts typically depict conventionally attractive White women and often

131 exclude other marginalised bodies, such as diverse ethnicities, individuals with a physical

132 disability, and gender non-conforming bodies (Dalessandro, 2016). Moreover, some critics

133 argue that, just like thin-ideal accounts, body positive accounts are becoming commodified as

134 they grow in popularity, whereby influencers are paid to promote commercial products

135   (Cwynar-Horta, 2016). Cwynar-Horta (2016) further argues that, during this

136   commodification process, body positive advocates deviate from their initial body positive

137   ideals and their Instagram content begins to resemble the more dominant appearance-focused

138   content on Instagram.

139   Despite these concerns, no research to date has systematically examined body positive

140   content on social media to determine whether it does in fact promote what it intends. For

141   example, *fitspiration* is ostensibly intended to promote health and fitness, yet content

142   analyses have found that it promotes thinness and disordered eating (Boepple et al., 2016;

143   Simpson & Mazzeo, 2017; Tiggemann & Zaccardo, 2018; Wick & Harriger, 2018). In

144   addition, viewing such content has been found to be associated with greater body

145   dissatisfaction and have no relationship with actual exercise behaviour (Robinson et al.,

146   2017; Tiggemann & Zaccardo, 2015). Similarly, research examining body positive content is

147   necessary to further develop our understanding of the emerging social and cultural influences

148   that may be contributing to the shifting body image landscape.

149   One content analysis, however, examined the different types of fat acceptance

150   messages on Instagram by comparing 200 images tagged with the hashtag "#fatspiration" and

151   200 images tagged with "#healthateverysize" (Webb et al., 2017a). Images across both

152   groups were found to represent predominantly White women of high "normal weight" to low

153   "overweight" body mass index (BMI). Despite these similarities, images associated with

154   #fatspiration more frequently conveyed messages of fat acceptance through fashion and

155   beauty-related activism (i.e., selfies, clothing item or fashion accessory prominently featured,

156   additional fashion and beauty hashtags), whereas images tagged with #healthateverysize

157   more often endorsed physical activity, health, and wellness. Surprisingly, posts tagged with

158   #healthateverysize were associated with fat stigmatising content. Webb et al. (2017a)

159   speculated that this weight stigmatising content may stem from the public's scepticism that

160 an individual can be both "fat and fit," and the resulting belief that this type of content may

161 negatively impact users' motivation to seek support for engaging in healthy lifestyle

162 behaviours. Whilst this content analysis demonstrated the multi-faceted nature of fat

163 acceptance messages on Instagram, it did not examine broader body positive content (Webb

164 et al., 2017a).

165   Accordingly, despite body positivity's growing influence and popularity on

166 Instagram, it remains unclear what messages are being disseminated across leading body

167 positive accounts, and how closely these messages align with the theoretical understandings

168 of positive body image. If predominant body positive accounts are aligned with positive body

169 image constructs, this may present a unique avenue to foster positive body image in young

170 women. Alternatively, if appearance-ideal attributes and messages are heavily featured

171 instead, this type of imagery may contribute to negative body image similar to other

172 appearance-focused social media content. Therefore, a systematic analysis of this body

173 positive content may provide valuable information for future prevention research and

174 initiatives.

175 **1.5. The Present Study**

176   The present study aimed to investigate the content depicted in prominent body

177 positive Instagram accounts, and to examine how closely this content aligns with the

178 theoretical core components of positive body image, as outlined by Tylka (2012, 2018) and

179 expanded by Tylka and Wood-Barcalow (2015b). Previous content analyses of *fitspiration*

180 and *thinspiration* social media content have found that the women depicted in these images

181 typically subscribe to ultra-thin or thin-athletic body ideals and are often posing in an

182 objectified way. We therefore aimed to examine the visual depiction of individuals in body

183 positive accounts, in terms of appearance and level of objectification. In response to the

184 potential criticism of body positive accounts as still being heavily focused on appearance, a

185 further aim was to examine appearance-focused themes. Based on a scoping review of

186 current popular accounts (elaborated in the Method), we hypothesised that body positive

187 Instagram accounts would depict a broad range of bodies and depict themes congruent with

188 positive body image, but would also contain appearance-focused content.

2. Method

2.1. Sample

191   To acquire the sample frame of popular body positive Instagram accounts, the search

192 term "top body positive Instagram accounts" was entered into the three most used online

193 search engines (Google, Bing, and Yahoo!). This purposive sampling approach is consistent

194 with previous content analyses interested in the predominant appearance-related messages

195 being communicated to consumers in magazines, books, and television (Aubrey, 2010;

196 Boepple et al., 2016; Conlin & Bissell, 2014; Herbozo, Tantleff-Dunn, Gokee-Larose, &

197 Thompson, 2004; Wasylkiw, Emms, Meuse, & Poirier, 2009). The search was conducted in

198 January 2018 from a public library computer on a private browser to avoid targeted responses

199 based on previous search histories and cookies. Consistent with Boepple et al. (2016), links

200 were sampled from the first webpage returned by each search engine, because this presents

201 the most widely accessed and influential websites (Hindman, Tsioutsiouliklis, & Johnson,

202 2003).

203   The search returned 16 unique links. Links were excluded if they did not list

204 individual accounts ($n = 1$) or if they were older than December 2016 ($n = 4$), yielding a final

205 sample frame of 11 website articles listing 67 unique Instagram accounts in total. Inclusion of

206 each account was determined by four main criteria: (1) popularity (minimum 50,000

207 followers; $n = 20$ removed), (2) activity level on Instagram (minimum 100 posts, including

208 the most recent post being made within two weeks of sampling; $n = 4$ removed), (3) body

209 positive-related content (e.g., account biography references body positivity/positive body

210   image; *n* = 10 removed), and (4) English as primary language used in posts (*n* = 1 removed).

211   All body positive accounts that met criteria were retained for coding (*n* = 32).

212   Twenty posts were then randomly sampled from each account, generating a final

213   sample of 640 posts for coding. The target sample size was selected based on previous

214   research (Boepple & Thompson, 2016; Tiggemann & Zaccardo, 2018). Posts were randomly

215   sampled using a random number generator across the 2017 calendar year to ensure the

216   sample represented up-to-date body positive content without the potential biases that would

217   arise from sampling consecutive posts during a particular week or month (e.g., only summer).

218   **2.2. Coding Procedures**

219   Since there was no prior codebook of body positive content on social media, a

220   codebook was created for the present study based on theoretical concepts, prior content

221   analyses of social media content, and a scoping review of body positive content. Specifically,

222   the body positive coding categories were developed based on Tylka (2012, 2018) and Tylka

223   and Wood-Barcalow's (2015b) core components of positive body image. Appearance-

224   focused coding categories were derived from previous content analyses of appearance-related

225   content on social media (Boepple et al., 2016; Webb et al., 2017a). In addition, the first and

226   second authors conducted an initial scoping review of the images to determine which

227   variables were relevant for the analysis. Six additional attributes/themes emerged from this

228   scoping review: two additional demographic and body-related attributes (i.e., visible physical

229   disability and perceived "flaws") and four other relevant themes (i.e., commercialism, mental

230   health, eating disorders, and activism).

231   The first author and the main coder (second author, postgraduate psychology student)

232   met for a series of training sessions involving an iterative process of consensus coding and

233   making updates to the original codebook. Following this process, two rounds of pilot coding

234   were conducted using posts captured in February 2018; 32 posts were analysed each time

235 (not included in the final analysis). Each coder rated the posts independently and then met to

236 discuss any discrepancies. This resulted in finalising the coding instrument. Following

237 training and codebook refinement, the main coder went on to code all 640 official posts. To

238 establish inter-rater agreement and reliability (Table 2), a second coder (third author, PhD-

239 level clinical psychologist) was trained in the coding procedures and coded a random

240 selection of 10% of the posts for all study variables according to the codebook. The total

241 agreement across all coding was 94.23%, indicating a high level of inter-coder agreement.

242 Inter-rater reliability was calculated for nominal variables using Cohen's Kappa (average κ

243 =.85, indicating high reliability; Landis & Koch, 1977), and for continuous variables using

244 two-way mixed intra-class correlation coefficients (average ICC = .95, indicating excellent

245 reliability; Cicchetti, 1994). A third coder resolved any discrepancies.

246 **2.3. Coding Attributes and Themes**

247   The Instagram posts were coded on three levels: (1) Imagery (not including caption);

248 (2) Human subjects (if present in Imagery); and (3) Post themes (including imagery, caption,

249 and hashtags).

250   **2.3.1. Imagery.** The visual component of posts was coded as: (a) visual image only

251 (human figure/s, cartoon figure/s of humans, or non-human image of nature, food, animals);

252 (b) text only (motivational quote, educational text, humorous text, opinion, other); (c) visual

253 image and text combined (e.g., quote overlaid on an image); or (d) video.

254   **2.3.2. Human subjects.** Imagery containing humans or cartoon figures of humans

255 were coded further for demographics, body-related attributes, clothing, activity, and

256 objectification. If the imagery contained more than one dominant human figure, each figure

257 was coded individually for these features. Still images and videos were coded in the same

258 way, with videos coded at the overall video level in line with prior content analyses of video

259 content (see for example, Aubrey & Frisby, 2011).

11

260   **2.3.2.1. *Demographics.*** In line with Webb et al.'s (2017a; 2017b) rating schemes,

261   human subjects were coded for perceived gender (female, male, other), age range (<15-years-

262   old, 15-20-years-old, 20s, 30s, 40s, 50s, 60s or older), and race/ethnicity (African-

263   American/Black, Asian, White, Indigenous, Middle Eastern, or other). Additionally, subjects

264   were coded for the presence of a physical difference or disability (e.g., missing limb,

265   wheelchair, obvious scarring on body, and colostomy bag).

266   **2.3.2.2. *Body-related attributes.*** Consistent with previous content analyses of

267   multiethnic samples (Thompson-Brenner, Boisseau, & Paul, 2011; Webb et al., 2017b), the

268   subjects' body size was rated according to Pulvers' (2004) Figure Rating Scale. This scale

269   consists of nine drawings depicting progressively larger body sizes (correlating with BMI

270   scores), ranging from underweight (Figure 1) to obese III (Figure 9; Pulvers, Bachand,

271   Nollen, Guo, & Ahluwalia, 2013). Ratings consisted of selecting the figure that most closely

272   corresponded to the body size of the human figure in the image. Following Boepple et al.

273   (2016), coders rated the extent to which the subject met other culturally-based beauty ideals

274   (i.e., clear, blemish free skin; neat, shiny hair; symmetrical features; and straight, white

275   teeth). These features were considered collectively to give an overall rating, ranging from 1 =

276   not at all to 4 = to a great extent. Based on a scoping review of body positive content,

277   subjects were also coded for the presence or absence of perceived "flaws" visible in the

278   image (i.e., attributes incongruent with societal beauty ideals such as cellulite, stretch marks,

279   acne, bodily hair, and rolls of fat on stomach).

280   **2.3.2.3. *Clothing, activity, and objectification.*** The subject's level of

281   clothing/exposure was coded in line with previous research (Conlin & Bissell, 2014; Simpson

282   & Mazzeo, 2017; Wasylkiw et al., 2009; Webb et al., 2017b). Clothing/exposure was

283   classified as 1 = not at all revealing (e.g., long pants and long-sleeve shirt, long dress), 2 =

284   slightly revealing (e.g., shorts and top, shorts and skirt, sleeveless dress), 3 = moderately

285 revealing (e.g., tight workout attire, midriff top, short-shorts, mini skirt), 4 = very revealing

286 (e.g., bathing suit, lingerie), 5 = extremely revealing (e.g., nude), or 0 = not shown (e.g., face

287 only). In line with previous content analyses (Simpson & Mazzeo, 2017; Tiggemann &

288 Zaccardo, 2018; Wasylkiw et al., 2009; Webb et al., 2017b), the activity in which the subject

289 was engaging in was categorised as: active (exercising or moving) or non-active (glamour

290 posing or passive posture). Activities coded as "exercising" included exercises such as

291 running, gym workouts, and active yoga poses, whereas "moving" referred to any general

292 movement of the body not for exercise (e.g., "jumping for joy", shaking the body, frolicking

293 on the beach). Finally, subjects were coded for the presence or absence of three objectifying

294 features: focus on a specific body part, a sexually suggestive pose, or absence of a clearly

295 visible head and/or face (Tiggemann & Zaccardo, 2018).

296   **2.3.3. Post themes.** Each image and caption (including relevant hashtags) were coded

297 together to determine the overall theme of the post. Thematic codes were not mutually

298 exclusive, such that multiple thematic codes could be applied to one post. More detail for

299 each theme can be found in Table 1.

300   **2.3.3.1.** *Positive body image themes.* Posts were coded for the presence of the six-

301 core positive body image themes: (1) body appreciation, (2) body acceptance/love, (3)

302 conceptualising beauty broadly, (4) adaptive investment in body care, (5) inner positivity, and

303 (6) protective filtering information in a body-protective manner.

304   **2.3.3.2.** *Appearance-focused themes.* Appearance-focused themes were adapted from

305 Boepple et al. (2016) and Webb et al.'s (2017a) analyses and included: (1) weight

306 loss/exercise/diet-appearance, (2) clothing/beauty-appearance, (3) thin praise, (4) weight/fat

307 stigmatising, (5) thin stigmatising, and (6) body/weight/food shame.

308   **2.3.3.3. *Other relevant themes.*** Finally, based on a scoping review of the body

309   positive content, other common themes emerged that were included as coding variables: (1)

310   commercialism; (2) mental health; (3) eating disorders; and (4) activism.

311   **3.   Results**

312   **3.1. Imagery**

313   Overall, 71.88% of posts were visual images only, 12.34% were videos, 10.47%

314   visual and text combined, and 5.31% text only. Of the imagery containing text (i.e., "visual

315   and text combined," and "text only"), 41.58% were rated as motivational, 24.75%

316   educational, 21.78% opinion, 3.96% humorous, and 7.92% other. Majority of imagery

317   (90.78%) contained at least one human figure.

318   **3.2. Human Subjects**

319   **3.2.1. Demographics.** Of the imagery that contained at least one human figure,

320   95.87% contained a female, 5.85% contained a male, and zero contained a non-binary person.

321   Of the imagery that contained at least one human figure, 51.12% featured a human coded as

322   White, 35.11% as African-American/Black, 12.22% as Asian, 6.2% as Other, 3.10% as

323   Middle Eastern, and 2.58% ethnicity could not be determined. The majority (65.58%) of

324   imagery containing humans depicted humans in their 20s, followed by 22.20% in their 30s,

325   4.30% perceived to be adolescent or younger, and only 2.75% perceived to be in their 40s or

326   older. Only 2.24% of imagery featured human figures with a visible physical disability.

327   **3.2.2. Body-related attributes.** Body sizes ranged from underweight (Figure 1) to

328   obese III (Figure 9; Pulvers et al., 2013). Only 1.72% of imagery containing humans featured

329   bodies perceived as underweight (Figures 1-2), 25.81% as normal weight (Figures 3-4),

330   33.22% as overweight (Figure 5) and 35.11% as obese (Figures 6-9). Just under half

331   (39.59%) of imagery containing a human depicted at least one perceived "flaw," with the

332   most common "flaw" displayed being cellulite (29.19% of all occurrences), followed by

333 stomach rolls/soft belly (24.05%), stretch marks (16.49%), acne/skin blemishes (5.41%), and

334 bodily hair (2.43%). Additionally, other "flaws" were depicted including facial hair, scars,

335 wrinkles, and rolls of fat on the back (24.32%). Apart from body weight, 25.47% of imagery

336 containing humans featured humans who met other culturally-based beauty ideals to a great

337 extent, 17.97% somewhat, 20.16% very little, and 24.22% did not at all meet other culturally-

338 based beauty ideals.

339   **3.2.3. Clothing, activity, and objectification.** Of the imagery containing humans,

340 83.82% were in a non-action pose and 15.15% in an action pose (i.e., exercise or movement).

341 Almost one third (31.67%) of imagery containing humans depicted bodies in extremely

342 revealing (5.85%) or very revealing (25.82%) clothing, 30.46% were in moderately

343 revealing, 25.13% in slightly revealing, and 14.29% not at all revealing clothing. Just over a

344 third (34.25%) of imagery of humans featured at least one of the specified aspects of

345 objectification; the majority were posing in a suggestive manner (84.42% of instances of

346 objectification), followed by the head/face being absent or not clearly visible (24.12%), and a

347 specific body part being the focus of the image (22.61%).

348 **3.3. Post Themes**

349   **3.3.1. Positive body image themes.** Overall, 80.15% (513/640) of all posts contained

350 at least one explicit positive body image theme, with a total of 875 positive body image

351 themes across all posts. Of the posts containing at least one positive body image theme, the

352 most frequent theme depicted was conceptualising beauty broadly (65.89%), followed by

353 body acceptance/love (33.53%), inner positivity (31.38%), protective filtering of information

354 in a body-protective manner (18.13%), adaptive investment in body care (11.11%), and body

355 appreciation (10.53%).

356   **3.3.2. Appearance-focused themes.** Overall, 41.09% (263/640) of all posts contained

357 at least one appearance-focused theme, with a total of 264 appearance-focused themes across

358 all posts. Almost all of the posts that were coded for appearance-focused themes depicted

359 clothing/beauty-appearance (98.86%), with only 1.52% of appearance-focused posts

360 depicting weight loss/exercise/diet-appearance. There were no instances of thin praise,

361 weight/fat stigmatisation, thin stigmatisation, or body/weight food shame (all 0%). Of note,

362 only 2.50% of all posts featured food and 4.00% featured exercise.

363   **3.3.3. Other relevant themes.** Overall, 39.53% (253/640) of all posts were rated as

364 promoting a commercial product (26.09% of these posts included self-promotion, e.g.,

365 personal blog, workshop, or book). Mental health was referred to in 1.88% of all posts and

366 eating disorders were referenced in 3.75% of all posts. Activism/rhetoric was present in

367 16.09% of all posts, with 123 counts of activism across 103 posts. Of the posts containing an

368 activist message, the majority were related to feminism (44.66%), followed by racial equality

369 (34.95%), LGBTQI+ rights (18.45%), environmentalism (7.77%), disability rights (7.77%),

370 and other (5.83%).

371   **4. Discussion**

372 **4.1. Body Positive Attributes and Themes**

373   The present study aimed to provide a detailed content analysis of posts found on

374 popular body positive accounts on Instagram. In line with our hypothesis regarding body

375 attributes, the analysis clearly showed that the body positive accounts depicted diverse body

376 sizes, with just over two thirds of bodies perceived to meet overweight or obese BMI criteria.

377 This diversity is in contrast to content analyses showing that *thinspiration* and *fitspiration*

378 images represent a limited range of body sizes, with an overwhelming majority of the bodies

379 featured being perceived as thin and toned (ranging from 75.2% - 97.82%; Boepple et al.,

380 2016; Carrotte et al., 2017; Talbot, Gavin, van Steen, & Morey, 2017; Tiggemann &

381 Zaccardo, 2018). Further, in contrast to Boepple et al. (2016), who found that majority of

382 *fitspiration* images featured women who met culturally-based standards of beauty ideals, the

383   body positive posts contained more diversity in the extent to which individuals pictured met

384   culturally-based beauty ideals.

385   Almost half of the imagery of human bodies displayed attributes incongruent with

386   societal beauty ideals such as cellulite, stomach rolls, stretch marks, and skin blemishes. This

387   finding is unique, given that social media feeds are often referred to as "highlight reels"

388   (Steers, Wickham, & Acitelli, 2014; Weinstein, 2017; Wiederhold, 2018). Social media users

389   have been found to portray their best version of themselves, carefully posing, selecting, and

390   even editing their photos before posting to hide or remove such societally deemed "flaws"

391   (Cohen et al., 2018; Fox & Vendemia, 2016). Acne, cellulite, and stretch marks are only

392   typically depicted in mainstream media in the context of a celebrity's body being scrutinised

393   for such "flaws," or an advertisement for a beauty product to eliminate them.

394   These findings of diverse body attributes are somewhat contrary to criticism that

395   popular body positive accounts typically depict conventionally attractive White women

396   (Dalessandro, 2016). Compared to the largely White samples found in other online trends

397   (e.g., Fitspiration, Fatspiration, and Health at Every Size; Simpson & Mazzeo, 2017; Webb et

398   al., 2017a), only half of the current sample were rated as White. Nevertheless, the posts

399   predominantly featured female subjects in their 20s, which is similar to other social media

400   trends (e.g., Ghaznavi & Taylor, 2015; Simpson & Mazzeo, 2017; Tiggemann & Zaccardo,

401   2018), and accordingly there may be scope for body positive accounts to include greater

402   diversity of age and gender.

403   In addition to examining the body attributes displayed in body positive posts on

404   Instagram, the current study was also interested in how body positive content aligns with the

405   theoretical definition of positive body image. In support of the hypothesis, an overwhelming

406   majority of posts contained messages in line with at least one of the six core features of

407   positive body image (Tylka, 2012, 2018; Tylka & Wood-Barcalow, 2015b). This finding

408 suggests that popular body positive accounts on Instagram currently exemplify core

409 components of positive body image.

410   Of the posts containing positive body image themes, the most common theme was

411 broad conceptualisation of beauty, which was depicted by two thirds of these posts. These

412 posts ranged from cartoon images of a woman's cellulite and stomach fat with a caption

413 stating "…all those parts you see as flaws whenever you look in the mirror… they are

414 natural, beautiful parts of the human body…," to an image of @Ashleygraham posing in a

415 bikini for a photoshoot with untouched fat rolls and cellulite, and the caption "Summer is

416 Here. And so am I. #swimsuitsforall." The next most common theme was body

417 acceptance/love, which included posts like a close-up photo of @harnaamkaur, a British-

418 Indian woman in her 20s with a beard (due to a medical condition), and the caption "Self-

419 love is a sense of self liberation that you feel for yourself for every 'flaw' that you have.

420 You're unique and beautifully special!" A third of body positive posts focused on cultivating

421 inner characteristics and positive feelings (inner positivity), such as an image of a billboard

422 stating, "We get so worried about being pretty. Let's be pretty kind. Pretty funny. Pretty

423 smart. Pretty strong."

424   Though less common, a proportion of posts also depicted protective filtering of

425 information in a body-protective manner (e.g., two images of @bodyposipanda side-by-side;

426 the first posed and edited, and the second unposed and unedited with the caption, "the photo

427 on the left is staged as hell….these are the types of images we compare ourselves to

428 everyday!"), adaptive investment in body care (e.g., photo of @nolatrees in a yoga pose with

429 the caption, "time for self-care continuously changes my relationship with my body, with my

430 mind, and with the entire world around me"), and body appreciation (an image of @bostanley

431 surfing in a bikini with the caption, "…when I see a belly or fold in surf shots I love it

432 because I am moving my body in amazing ways because it's strong, capable and healthy").

433   Taken together, the current findings indicate that body positive accounts on Instagram

434   may provide a unique perspective in an otherwise perfectly manicured environment for

435   young women to view bodies much like their own with natural "lumps, bumps, and curves"

436   that are displayed openly. Previous experimental research has found that viewers'

437   experienced greater acceptance of their own bodies following exposure to bodies that do not

438   conform to the thin-ideal (Williamson & Karazsia, 2018), and self-compassion quotes on

439   Instagram (Slater, Varsani, & Diedrichs, 2017). Notably, a recent experimental study has

440   shown that exposure to body positive content on Instagram has an immediate positive effect

441   on women's mood, body satisfaction, and body appreciation (Cohen, Fardouly, Newton-John,

442   & Slater, 2019). Further research is necessary to more fully understand the impact of viewing

443   such imagery on viewers' perceptions of their own bodies.

444   **4.2. Appearance-focused Attributes and Themes**

445   In line with prior content analyses of appearance-focused media content (Boepple et

446   al., 2016; Conlin & Bissell, 2014; Simpson & Mazzeo, 2017; Tiggemann & Zaccardo, 2018;

447   Wasylkiw et al., 2009; Webb et al., 2017a) and objectification theory (Fredrickson &

448   Roberts, 1997), posts were coded for objectifying attributes as well as appearance-focused

449   themes. Interestingly, most subjects were in a non-active pose, and around a third of the

450   women were in very or extremely revealing clothing and featured some degree of

451   objectification, predominantly posing in a suggestive manner. Similarly, over a third of posts

452   emphasised clothing and beauty for appearance. It has been suggested that a focus on

453   appearance is intrinsic to the photo-based platform of Instagram, whereby users primarily

454   post images of themselves explicitly for others to look at (Tiggemann & Zaccardo, 2018). Of

455   note, the overall frequency of body exposure, objectification, and appearance-focused themes

456   was considerably lower than in other appearance-focused content analyses (e.g., Boepple et

457   al., 2016; Ghaznavi & Taylor, 2015; Simpson & Mazzeo, 2017; Tiggemann & Zaccardo,

458   2018). Nevertheless, these findings suggest that a proportion of body positive posts on

459   Instagram may emphasise appearance over other attributes, just like other forms of

460   appearance-focused social media.

461   On the other hand, this appearance focus may be intentional given that a purported

462   aim of body positive advocates on Instagram is to take up space in an arena where their

463   bodies have previously been excluded (Cwynar-Horta, 2016). Indeed, Webb et al. (2017a)

464   similarly pointed out the difficulty teasing apart positive body image and body objectification

465   in fat acceptance communities. Women of larger bodies proudly posing in body-revealing

466   attire could both be seen as an expression of positive body image, demonstrating acceptance

467   of and pride in their body, or self-objectification, reflecting a focus on one's appearance over

468   other attributes (Webb et al., 2017a). This idea is supported by one influential body positive

469   advocate, Megan Crabbe (@bodyposipanda), who stated, "posting pictures that challenge the

470   conventional unrealistic standard of beauty is a way to use the system to change the system"

471   (Ciuca, 2018). Accordingly, when viewed in this context, the photo-based and user-generated

472   features of Instagram may provide a unique platform for body positive advocates to represent

473   a broad range of appearances and bodies as beautiful.

474   Indeed, the majority of posts that were coded for clothing/beauty-appearance were

475   simultaneously coded for Tylka (2012, 2018) and Tylka and Wood-Barcalow's (2015b)

476   positive body image concept of "conceptualising beauty broadly." Furthermore, almost all of

477   the posts coded as "appearance-focused" referred to clothing/beauty-appearance. There were

478   minimal references to more "dysfunctional" appearance-focused themes (i.e., weight

479   loss/exercise/diet-appearance, thin praise, weight/fat stigmatisation, or body/weight/food

480   shame), which are commonly found in *thinspiration* and *fitspiration* content (Boepple et al.,

481   2016; Boepple & Thompson, 2016; Simpson & Mazzeo, 2017). Together, these findings

482   suggest that body positive posts with an appearance-focus are qualitatively different to

483 *thinspiration* and *fitspiration* posts. Nevertheless, the overlap between appearance-focused

484 and positive body image features requires further investigation to determine whether or not it

485 has similar effects on body image as other appearance-focused content.

486   Two additional themes emerged as relatively common in the body positive content:

487 commercialism and activism. Over a third of all posts were rated as promoting a commercial

488 product or self-promotion. This finding is consistent with prior criticism of the

489 commodification of body positivity on social media (Cwynar-Horta, 2016), and is not

490 surprising given that the sample consisted of popular Instagram accounts with at least 50

491 thousand followers each. Typically, such "influencers" with large followings monetise their

492 platforms to earn an income (Smith, Kendall, & Knighton, 2018). This may be through

493 sponsored posts, whereby influencers are paid to feature a brand in their post, or by selling

494 their own products such as a new book or upcoming yoga workshop. However, Cwynar-

495 Horta (2016) also suggested that during the commodification process, the content of body

496 positive accounts diverge from body positive ideals in favour of consumption practices. In

497 contrast to this claim, the current study found that even with 39.5% of posts advertising

498 products, the majority (80%) were still promoting messages consistent with positive body

499 image. Lastly, a sixth of posts encouraged others to support a social cause outside of body

500 positivity, such as feminism, racial equality, and LGBTQIA+ rights. This finding indicates

501 that, though originally created to encourage acceptance of all body sizes, body positive

502 Instagram advocates are expanding their focus to include and advocate for broader forms of

503 equality.

504   Interestingly, there were minimal explicit references to food and exercise across body

505 positive posts. Many body positive advocates and followers are recovering from an eating

506 disorder (Cwynar-Horta, 2016), and therefore it is possible that the minimal references to

507 food and exercise are deliberate. For example, @FatGirlFlow, a body positive activist with an

508   eating disorder history, explicitly aims to "keep dieting out of body positivity" (Petty, 2018).

509   This finding of minimal references to food and exercise (with the exception of yoga) across

510   the posts is also interesting in the context of recent claims that body positivity may promote

511   obesity and adverse health outcomes (Muttarak, 2018). To date there has been no empirical

512   evidence to support this assertion (Alleva & Tylka, 2018). Instead, such claims may reflect an

513   inherent weight bias that equates fat with unhealthy behaviours and assumes accepting one's

514   body means not taking care of it (Puhl & Heuer, 2009).

515   By contrast, research suggests that positive body image is related to health promoting

516   behaviours, including intuitive eating, physical activity, and health-seeking behaviours, and is

517   negatively associated with health compromising behaviours, such as dieting, alcohol, and

518   cigarette use (Andrew et al., 2016a, 2016b). In fact, although explicit references to food and

519   exercise were minimal, the message of adaptive investment in body care (Tylka & Wood-

520   Barcalow, 2015b) was featured in one tenth of all body positive posts. These posts focused on

521   self-care behaviours like rest, hydration, and physical activity for health and enjoyment

522   reasons. Moreover, any reference to appearance-related self-care (i.e., grooming, makeup,

523   and clothing) were framed in terms of how they made the subject feel rather than how they

524   looked (e.g., "sparkly eyeshadow makes me happy"). Body positive advocates have argued

525   that increasing the visibility of a diverse range of body sizes empowers larger women to

526   partake in health-promoting behaviours by breaking down weight stereotypes and perceived

527   barriers to health-promoting behaviours (Haskins, 2015). Here, of note, two of the Instagram

528   accounts analysed were yoga-focused accounts, @mynameisjessamyn and @nolatrees, who

529   both promote practicing yoga regardless of body size. In contrast, considerable evidence

530   demonstrates that weight stigmatisation and shame is linked with maladaptive eating

531   behaviours and weight gain (Puhl & Suh, 2015). Moreover, *fitspiration* content, aimed to

532   inspire healthy eating and exercise, has been found to have harmful psychological outcomes

533   and have no impact on actual exercise engagement (Robinson et al., 2017). Accordingly, it

534   would be worthwhile for future research to investigate the relationship between viewing body

535   positive social media content and actual health behaviours.

536   **4.3. Implications and Future Directions**

537   Positive body image has become increasingly recognised as an important component

538   of body image and eating disorder prevention (Webb, Wood-Barcalow, & Tylka, 2015).

539   Research links positive body image with numerous psychological and physical health

540   benefits (e.g., Andrew et al., 2014, 2016a; Homan & Tylka, 2014; Satinsky et al., 2012;

541   Swami et al., 2018; Tylka, 2012, 2018), as well as a potential protective role against media-

542   induced body dissatisfaction (Andrew, Tiggemann, & Clark, 2015; Halliwell, 2013). Given

543   this research, it is plausible that engaging with body positive content on Instagram, which

544   espouses key tenets of positive body image, may be associated with similar benefits for

545   women. Whilst causal effects cannot be inferred from this content analysis, these preliminary

546   findings suggest that popular body positive accounts on Instagram both depict a diverse range

547   of appearances and promote messages in line with important components of positive body

548   image, and therefore may present a fruitful avenue for future prevention research.

549   Social media usage is at an all-time high amongst young women (Pew Research

550   Center, 2018), and Instagram is one of the most dominant mediums for influencing user's

551   attitudes and behaviours (Kasana, 2014). Accordingly, it is imperative for research to identify

552   which types of content may be potentially beneficial or harmful in order to offer best practice

553   guidelines for social media consumers who may be at risk of body image issues. Susceptible

554   young women may be encouraged to minimise exposure to appearance-focused social media

555   content like *fitspiration* and *thinspiration* to reduce body image disturbances (Tiggemann &

556   Zaccardo, 2015). Concurrently, this study, together with preliminary experimental evidence

557   (Cohen et al., 2019; Slater et al., 2017; Williamson & Karazsia, 2018), suggests that young

558   women may usefully be encouraged to follow body positive accounts as a possible avenue to

559   enhance positive body image. Nevertheless, research shows that body dissatisfaction and

560   disordered eating occur in both women and men of all ages (Mangweth-Matzek & Hoek,

561   2017). Accordingly, there may be scope for body positive accounts to include greater

562   diversity of both age and gender.

563   Interestingly, the theme of body appreciation was rated less frequently across the

564   Instagram posts compared to the other positive body image themes, yet body appreciation is

565   the most commonly studied aspect of positive body image in the literature (Webb et al.,

566   2015). Of note, our definition of body appreciation, taken from Tylka (2012, 2018) and Tylka

567   and Wood-Barcalow (2015b), is more consistent with functionality appreciation (Alleva,

568   Tylka, & Kroon Van Diest, 2017) than the body appreciation construct assessed by the Body

569   Appreciation Scale (BAS and BAS-2; Avalos, Tylka, & Wood-Barcalow, 2005; Tylka &

570   Wood-Barcalow, 2015a). The BAS and BAS-2 conceptualise and assess body appreciation as

571   an overarching construct of positive body image which contains many of the positive body

572   image components within its items, such as appreciating the unique features of the body,

573   body acceptance and love, broadly conceptualising beauty, inner positivity, adaptive

574   investment in body care, and protective filtering. Nevertheless, it is important to examine

575   each component of positive body image separately within research, and scales are now being

576   developed to achieve this goal (Tylka, 2018).

577   Broad conceptualisation of beauty emerged as the most common theme across the

578   body positive posts, but has been less extensively researched apart from the body

579   appreciation construct assessed by the BAS-2. Our findings provide a better understanding of

580   consumer experiences of positive body image and highlight that broad conceptualisation of

581   beauty may be a particularly important component of positive body image for social media

582   users. Accordingly, the study's findings identify broad conceptualisation of beauty as an

583   important component to investigate for future research, which can be done using the Broad

584   Conceptualization of Beauty Scale (Tylka & Iannantuono, 2016).

585   **4.4. Limitations**

586   The present findings should be interpreted within the context of the following

587   limitations. First, the findings are limited to the sampling frame used. It is possible that the

588   accounts featured on the websites may have paid to be listed in those articles, or were

589   purposefully selected by the articles' authors based on personal preferences. Despite these

590   potential selection biases, online articles are a common way that the public may encounter

591   such accounts, and therefore this search method is unlikely to impact the external validity of

592   these findings. Furthermore, various inclusion criteria were used to ensure the accounts

593   sampled were in fact relevant to body positivity, currently active, and popular. This sampling

594   frame was the preferred approach given that our main aim was to analyse the current state of

595   content depicted in prominent body positive Instagram accounts. Nevertheless, it would be

596   informative for future research to conduct a corresponding analysis of body positive-related

597   hashtags to understand how the broader community of Instagram users are interpreting and

598   engaging with body positive content online.

599   Second, the exploration of body positive characteristics evident in body positive

600   Instagram posts is limited by the themes selected for coding. For the purpose of this content

601   analysis, Tylka (2012, 2018) and Tylka and Wood-Barcalow's (2015b) six core components

602   of positive body image were used to code the posts for body positive themes. Given the

603   emerging field of positive body image research, several other constructs of positive body

604   image have also been developed. These include body functionality (Alleva, Martijn, Van

605   Breukelen, Jansen, & Karos, 2015), body image flexibility (Rogers, Webb, & Jafari, 2018;

606   Sandoz, Wilson, Merwin, & Kellum, 2013), and body compassion (Altman, Linfield,

607   Salmon, & Beacham, 2017). Accordingly, future research would benefit from exploring how

608 some of these other contemporary positive body image constructs may be expressed in the

609 social media environment.

4.5. Conclusion

611   Despite these limitations, the present study uniquely contributes to the body image

612 and social media literature by providing a systematic analysis of physical appearance-related

613 characteristics and key themes from body positive content on Instagram. Importantly, the

614 current findings indicate that, in contrast to the narrow portrayal of female bodies in

615 traditional media (Conlin & Bissell, 2014; Wasylkiw et al., 2009) and social media content

616 (Boepple et al., 2016; Carrotte et al., 2017; Talbot et al., 2017; Tiggemann & Zaccardo,

617 2018), body positive imagery on Instagram does in fact represent previously under-

618 represented body sizes. Moreover, the findings suggest that popular body positive accounts

619 on Instagram currently exemplify core theoretical components of positive body image (Tylka,

620 2012, 2018; Tylka & Wood-Barcalow, 2015b). The findings extend previous research on

621 appearance-focused social media use and provide an incremental contribution to the positive

622 body image literature.

Table 1. Post themes

Variable	Definition	Examples
Positive body image themes		
Body Appreciation	Post encourages appreciating the features, functionality, and health of the body	Image of subject in yoga pose with caption "I'm feeling especially thankful for my thighs today. I am always in awe of what my thighs help me do, whether it's when I'm walking down the street or powering through balance postures."
Body Acceptance/love	Post encourages acceptance of one's body (or body parts) that don't conform to ideal standards	Image of subject in bikini with stomach rolls with caption "It is possible to love your belly rolls"
Conceptualising Beauty Broadly	Post depicts a wide range of appearances, body sizes/shapes, and inner characteristic as beautiful	Image of women of diverse body sizes and ethnicities with caption "everyBODY is beautiful"
Adaptive Investment in Body Care	Post emphasises respecting and taking care of one's body by engaging in positive, health-promoting self-care behaviours	Image of subject exercising with caption "workout because you love your body, not because you hate it"
Inner Positivity	Post encourages cultivating inner characteristics and positive feelings (e.g., body confidence, optimism, happiness) that may be expressed in outer behaviours (e.g., kindness, mindfulness, helping others etc.).	Image of subject smiling with head held high and caption "be strong by being kind to yourself and by sharing your light with the world"
Protective filtering Information in a Body-Protective Manner	Post challenges the unrealistic nature of media images and appearance ideals, as well as interprets and internalises messages that are compassionate towards one's body.	Side by side images of posed and un-posed images with caption "the photo on the left is staged as hell…These are the types of images we compare ourselves to everyday. Our bodies are glorious from every angle. Posed or un-posed. Polished or not."
Appearance-focused Themes		
Weight loss/exercise/diet-appearance	Post emphasises weight loss, diet and/or exercise to improve appearance	Before and after photo where the subject in the 'after' photo appears thinner and caption "Went back to work today and had a lot of people say I was looking way more toned woohoo!"
Clothing/beauty-appearance	Post emphasises clothing and beauty tips for appearance purposes	Close-up image of hair and make-up with caption "if there's good lighting, take advantage of it for a selfie"

Thin praise	Post positively portrays thinness	Image of a thin and toned person with caption #bodygoals
Weight/fat stigmatising	Post negatively portrays being overweight/having fat	Image of larger woman in bikini with caption "not everyone should be in a swimsuit"
Thin stigmatising	Post ridicules or stigmatises thinness	Image of curvaceous woman with caption "real men prefer women with curves"
Body/weight/food shame	Post expresses guilt or shame about one's body, weight, or food behaviours	Image of subject at gym with caption "Feeling guilty about how much I ate on the weekend – time to work off that weekend indulgence."

Other Relevant Themes

Commercialism	Post advertises or promotes a commercial product or brand	Image of subject in a clothing brand with caption "love this outfit. Shop this look at xxx.com"
Mental health	Post refers to mental health	Side by side images of subject smiling and not smiling, with text overlaid "doing the best she can to cope with anxiety" with captions "remind yourself that it's okay to respect your own mental and emotional limits"
Eating disorders	Post refers to eating disorders and/or recovery	Before and after photo of subject (underweight to more body fat) with caption "Recovery is going to seem impossible at times – it isn't. Your ED will scream at you, and tell you you're nothing without it – it's lying. You can do this."
Activism	Post explicitly encourages others to support a social cause outside of body positivity	Image of subject holding re-usable water bottle with caption "Get on the plastic free wagon this July and challenge yourself to do something awesome for our planet and the future."

Table 2. Inter-coder agreement and reliability for coding variables.

Variable	Inter-rater Agreement (%)	Reliability (Kappa or ICC)
Demographics		
Gender	98.46	.81
Ethnicity	95.96	.86
Age	94.36	.97
Visible physical disability	96.92	.65
Body-related attributes		
Body size	89.69	.91
Culturally-based beauty ideals	80.62	.94
Visible "flaws"	96.41	.80
Visible "flaws": Cellulite	96.92	.73
Visible "flaws": Stomach rolls/soft belly	96.92	.86
Visible "flaws": Stretch marks	95.38	.74
Visible "flaws": Acne/skin blemishes	100.00	1
Visible "flaws": Bodily hair	92.31	.80
Clothing, activity, and objectification		
Clothing/exposure	92.97	.98
Activity	89.23	.77
Objectification	84.38	.88
Objectification: Focus on specific body part	95.31	.96
Objectification: Sexually suggestive pose	79.69	.84
Objectification: Absence of clearly visible head/face	92.19	.93
Positive Body Image Themes		
Body Appreciation	96.88	.86
Body Acceptance/love	92.19	.78
Conceptualising Beauty Broadly	87.50	.75
Adaptive Investment in Body Care	96.88	.87
Inner Positivity	89.06	.73
Protective filtering Information in a Body-Protective Manner	96.88	.87
Appearance-focused Themes		
Weight loss/exercise/diet-appearance	100.00	1
Clothing/beauty-appearance	89.06	.76
Thin praise	100.00	1
Weight/fat stigmatising	100.00	1
Thin stigmatising	100.00	1
Body/weight/food shame	100.00	1
Other Relevant Themes		
Commercialism	92.31	.83
Mental health	98.46	.79
Eating disorders	98.46	.85
Activism	98.44	.79

References

Afful, A. A., & Ricciardelli, R. (2015). Shaping the online fat acceptance movement: Talking about body image and beauty standards. *Journal of Gender Studies, 24*, 453-472. https://dx.doi.org/10.1080/09589236.2015.1028523

Alleva, J. M., Martijn, C., Van Breukelen, G. J., Jansen, A., & Karos, K. (2015). *Expand Your Horizon*: A programme that improves body image and reduces self-objectification by training women to focus on body functionality. *Body Image, 15*, 81-89. https://doi.org/10.1016/j.bodyim.2015.07.001

Alleva, J. M., & Tylka, T. L. (2018). Muttarak's study design cannot support the link between the body-positive movement and overweight or obesity. *Obesity, 26*, 1527-1527. https://doi.org/10.1002/oby.22281

Alleva, J. M., Tylka, T. L., & Kroon Van Diest, A. M. (2017). The Functionality Appreciation Scale (FAS): Development and psychometric evaluation in US community women and men. *Body image, 23*, 28-44. http://dx.doi.org/10.1016/j.bodyim.2017.07.008

Altman, J. K., Linfield, K., Salmon, P. G., & Beacham, A. O. (2017). The body compassion scale: Development and initial validation. *Journal of Health Psychology, 22*, 965–1100. https://doi.org/10.1177/1359105317718924

Andrew, R., Tiggemann, M., & Clark, L. (2014). An extension of the acceptance model of intuitive eating in adolescent girls: A role for social comparison? *Journal of Eating Disorders, 2*, O40. https://doi.org/10.1186/2050-2974-2-S1-O40

Andrew, R., Tiggemann, M., & Clark, L. (2015). The protective role of body appreciation against media-induced body dissatisfaction. *Body Image, 15*, 98-104. https://doi.org/10.1016/j.bodyim.2015.07.005

Andrew, R., Tiggemann, M., & Clark, L. (2016a). Positive body image and young women's health: Implications for sun protection, cancer screening, weight loss and alcohol consumption behaviours. *Journal of Health Psychology, 21*, 28-39. https://doi.org/10.1177/1359105314520814

Andrew, R., Tiggemann, M., & Clark, L. (2016b). Predictors and health-related outcomes of positive body image in adolescent girls: A prospective study. *Developmental Psychology, 52*, 463. https://dx.doi.org/10.1037/dev0000095

Aubrey, J. S. (2010). Looking good versus feeling good: An investigation of media frames of health advice and their effects on women's body-related self-perceptions. *Sex Roles, 63*, 50-63. https://doi.org/10.1007/s11199-010-9768-4

Aubrey, J. S., & Frisby, C. M. (2011). Sexual objectification in music videos: A content analysis comparing gender and genre. *Mass Communication and Society, 14*, 475-501. https://doi.org/10.1080/15205436.2010.513468

Augustus-Horvath, C. L., & Tylka, T. L. (2011). The acceptance model of intuitive eating: A comparison of women in emerging adulthood, early adulthood, and middle adulthood. *Journal of Counseling Psychology, 58*, 110. https://dx.doi.org/10.1037/a0022129

Avalos, L., Tylka, T. L., & Wood-Barcalow, N. (2005). The Body Appreciation Scale: Development and psychometric evaluation. *Body Image, 2*, 285-297. http://dx.doi.org/10.1016/j.bodyim.2005.06.002

Bair, C. E., Kelly, N. R., Serdar, K. L., & Mazzeo, S. E. (2012). Does the Internet function like magazines? An exploration of image-focused media, eating pathology, and body dissatisfaction. *Eating Behaviors, 13*, 398-401. http://dx.doi.org/10.1016/j.eatbeh.2012.06.003

Boepple, L., Ata, R. N., Rum, R., & Thompson, J. K. (2016). Strong is the new skinny: A

    content analysis of fitspiration websites. *Body Image, 17*, 132-135.

    http://dx.doi.org/10.1016/j.bodyim.2016.03.001

Boepple, L., & Thompson, J. K. (2016). A content analytic comparison of fitspiration and

    thinspiration websites. *International Journal of Eating Disorders, 49*, 98-101.

    http://dx.doi.org/10.1002/eat.22403

Carrotte, E. R., Prichard, I., & Lim, M. S. C. (2017). "Fitspiration" on social media: A

    content analysis of gendered images. *Journal of Medical Internet Research, 19*, e95.

    https://doi.org/10.2196/jmir.6368

Cicchetti, D. V. (1994). Guidelines, criteria, and rules of thumb for evaluating normed and

    standardized assessment instruments in psychology. *Psychological Assessment, 6*,

    284. https://doi.org/10.1037/1040-3590.6.4.284

Ciuca, A. (2018). *Is Instagram body positivity's most unlikely ally?* Retrieved from

    https://www.livestrong.com/article/13708860-is-instagram-body-positivitys-most-

    unlikely-ally/

Cohen, R., Fardouly, J., Newton-John, T., & Slater, A. (2019). #BoPo on Instagram: An

    experimental investigation of the effects of viewing body positive content on young

    women's mood and body image. *New Media & Society*. Advance online publication.

    https://doi.org/10.1177/1461444819826530

Cohen, R., Newton-John, T., & Slater, A. (2017). The relationship between Facebook and

    Instagram appearance-focused activities and body image concerns in young women.

    Body Image, 23, 183-187. https://doi.org/10.1016/j.bodyim.2017.10.002

Cohen, R., Newton-John, T., & Slater, A. (2018). 'Selfie'-objectification: The role of selfies

    in self-objectification and disordered eating in young women. *Computers in Human

    Behavior, 79*, 68-74. https://doi.org/10.1016/j.chb.2017.10.027

Conlin, L., & Bissell, K. (2014). Beauty ideals in the checkout aisle: Health-related messages

    in women's fashion and fitness magazines. *Journal of Magazine & New Media*

    Research, 15.

Cwynar-Horta, J. (2016). The commodification of the body positive movement on Instagram.

    Stream: Culture/Politics/Technology, 8, 36-56. https://doi.org/10.1016/B978-0-12-

    384925-0.00104-8

Dalessandro, A. (2016). *15 definitions of body positivity straight from influencers & activists*.

    Retrieved from https://www.bustle.com/articles/165804-15-definitions-of-body-

    positivity-straight-from-influencers-activists

Fox, J., & Vendemia, M. A. (2016). Selective self-presentation and social comparison

    through photographs on social networking sites. *Cyberpsychology, Behavior, and*

    Social Networking, 19, 593-600. https://dx.doi.org/10.1089/cyber.2016.0248

Frederick, D. A., Daniels, E. A., Bates, M. E., & Tylka, T. L. (2017). Exposure to thin-ideal

    media affect most, but not all, women: Results from the Perceived Effects of Media

    Exposure Scale and open-ended responses. *Body Image, 23*, 188-205.

    https://doi.org/10.1016/j.bodyim.2017.10.006

Fredrickson, B. L., & Roberts, T. A. (1997). Objectification theory: Toward understanding

    women's lived experiences and mental health risks. *Psychology of Women Quarterly,*

    21, 173-206. https://dx.doi.org/10.1111/j.1471-6402.1997.tb00108.x

Ghaznavi, J., & Taylor, L. D. (2015). Bones, body parts, and sex appeal: An analysis of

    #thinspiration images on popular social media. *Body Image, 14*, 54-61.

    https://doi.org/10.1016/j.bodyim.2015.03.006

Grabe, S., Ward, L., & Hyde, J. S. (2008). The role of the media in body image concerns

    among women: A meta-analysis of experimental and correlational studies.

Psychological Bulletin, 134, 460-476. https://dx.doi.org/10.1037/0033-2909.134.3.460

Groesz, L. M., Levine, M. P., & Murnen, S. K. (2002). The effect of experimental presentation of thin media images on body satisfaction: A meta-analytic review. *International Journal of Eating Disorders, 31*, 1-16. https://dx.doi.org/10.1002/eat.10005

Halliwell, E. (2013). The impact of thin idealized media images on body satisfaction: Does body appreciation protect women from negative effects? *Body Image, 10*, 509-514. https://dx.doi.org/10.1016/j.bodyim.2013.07.004

Halzack, S. (2016, November 2). Social media 'influencers': A marketing experiment grows into a mini-economy. *The Washington Post*. Retrieved from https://www.washingtonpost.com/business/economy/social-media-influencers-a-marketing-experiment-thats-metastasized-into-a-mini-economy/2016/11/02/bf14e23a-9c5d-11e6-9980-50913d68eacb_story.html?noredirect=on&utm_term=.f3367916d3c1

Haskins, J. (2015). *Does the 'body positive' movement promote health?* Blog post Retrieved from https://www.healthline.com/health-news/does-the-body-positive-movement-promote-health-081415 - 1

Herbozo, S., Tantleff-Dunn, S., Gokee-Larose, J., & Thompson, J. K. (2004). Beauty and thinness messages in children's media: A content analysis. *Eating Disorders, 12*, 21-34. https://doi.org/10.1080/10640260490267742

Hindman, M., Tsioutsiouliklis, K., & Johnson, J. A. (2003, April). *Googlearchy: How a few heavily-linked sites dominate politics on the web.* Paper presented at the Annual Meeting of the Midwest Political Science Association, Chicago, IL.

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, 388-395. https://doi.org/10.1016/j.bodyim.2012.03.007

Homan, K. J., & Tylka, T. L. (2014). Appearance-based exercise motivation moderates the

    relationship between exercise frequency and positive body image. *Body Image, 11*,

    101-108. https://dx.doi.org/10.1016/j.bodyim.2014.01.003

Kasana, M. (2014). Feminisms and the social media sphere. *Women's Studies Quarterly, 42*,

    236-249. https://dx.doi.org/10.1353/wsq.2014.0065

Landis, J. R., & Koch, G. G. (1977). The measurement of observer agreement for categorical

    data. *Biometrics*, 159-174. https://dx.doi.org/10.2307/2529310

Mangweth-Matzek, B., & Hoek, H. W. (2017). Epidemiology and treatment of eating

    disorders in men and women of middle and older age. *Current Opinion in Psychiatry,*

    30, 446. https://doi.org/10.1097/YCO.0000000000000356

Moss, R. (2017). *7 body-positive Instagram accounts to follow for A confidence boost*.

    Retrieved from https://www.huffingtonpost.co.uk/entry/7-body-positive-instagram-

    accounts-to-follow-for-an-instant-confidence-

    boost_uk_5a0d6bf0e4b0c0b2f2f7df0e?guccounter=1

Muttarak, R. (2018). Normalization of plus size and the danger of unseen overweight and

    obesity in England. *Obesity, 26*, 1125-1129. http://dx.doi.org/10.1002/oby.22204

Paraskeva, N., Lewis-Smith, H., & Diedrichs, P. C. (2017). Consumer opinion on social

    policy approaches to promoting positive body image: Airbrushed media images and

    disclaimer labels. *Journal of Health Psychology, 22*, 164-175.

    http://dx.doi.org/10.1177/1359105315597052

Petty, A. (2018). *Is the body-positivity movement going too far?* Blog post Retrieved from

    https://greatist.com/live/body-positivity-movement-too-far

Pew Research Center. (2018). *Social media use in 2018*. Retrieved from

http://www.pewinternet.org/2018/03/01/social-media-use-in-2018/.

Puhl, R., & Suh, Y. (2015). Health consequences of weight stigma: Implications for obesity

prevention and treatment. *Current Obesity Reports, 4*, 182-190.

https://dx.doi.org/10.1007/s13679-015-0153-z

Puhl, R. M., & Heuer, C. A. (2009). The stigma of obesity: A review and update. *Obesity, 17*,

941-964. https://dx.doi.org/10.1038/oby.2008.636

Pulvers, K., Bachand, J., Nollen, N., Guo, H., & Ahluwalia, J. S. (2013). BMI-based norms

for a culturally relevant body image scale among African Americans. *Eating*

Behaviors, 14, 437-440. https://dx.doi.org/10.1016/j.eatbeh.2013.07.005

Pulvers, K. M., Lee, R. E., Kaur, H., Mayo, M. S., Fitzgibbon, M. L., Jeffries, S. K., . . .

Ahluwalia, J. S. (2004). Development of a culturally relevant body image instrument

among urban African Americans. *Obesity, 12*, 1641-1651.

https://dx.doi.org/10.1038/oby.2004.204

Robinson, L., Prichard, I., Nikolaidis, A., Drummond, C., Drummond, M., & Tiggemann, M.

(2017). Idealised media images: The effect of fitspiration imagery on body

satisfaction and exercise behaviour. *Body Image, 22*, 65-71.

https://doi.org/10.1016/j.bodyim.2017.06.001

Rogers, C. B., Webb, J. B., & Jafari, N. (2018). A systematic review of the roles of body

image flexibility as correlate, moderator, mediator, and in intervention science (2011–

2018). *Body Image, 27*, 43-60. https://doi.org/10.1016/j.bodyim.2018.08.003

Saguy, A. C., & Ward, A. (2011). Coming out as fat: Rethinking stigma. *Social Psychology*

Quarterly, 74, 53-75. https://dx.doi.org/10.1177/0190272511398190

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 Behavioral Science, 2*, 39-48. http://dx.doi.org/10.1016/j.jcbs.2013.03.002

Satinsky, S., Reece, M., Dennis, B., Sanders, S., & Bardzell, S. (2012). An assessment of body appreciation and its relationship to sexual function in women. *Body Image, 9*, 137-144. https://dx.doi.org/10.1016/j.bodyim.2011.09.007

Simpson, C. C., & Mazzeo, S. E. (2017). Skinny is not enough: A content analysis of fitspiration on Pinterest. *Health Communication, 32*, 560-567. https://doi.org/10.1080/10410236.2016.1140273

Slater, A., Varsani, N., & Diedrichs, P. C. (2017). #fitspo or #loveyourself? The impact of fitspiration and self-compassion Instagram images on women's body image, self-compassion, and mood. *Body Image, 22*, 87-96. https://doi.org/10.1016/j.bodyim.2017.06.004

Smith, B. G., Kendall, M. C., & Knighton, D. (2018). Rise of the brand ambassador: Social stake, corporate social responsibility and influence among the social media influencers. *Communication Management Review, 3*, 6-29. https://dx.doi.org/10.22522/cmr20180127

Steers, M.-L. N., Wickham, R. E., & Acitelli, L. K. (2014). Seeing everyone else's highlight reels: How Facebook usage is linked to depressive symptoms. *Journal of Social and Clinical Psychology, 33*, 701-731. https://dx.doi.org/10.1521/jscp.2014.33.8.701

Swami, V., Weis, L., Barron, D., & Furnham, A. (2018). Positive body image is positively associated with hedonic (emotional) and eudaimonic (psychological and social) well-being in british adults. *Journal of Social Psychology, 158*, 541-552. https://doi.org/10.1080/00224545.2017.1392278

Talbot, C. V., Gavin, J., van Steen, T., & Morey, Y. (2017). A content analysis of
thinspiration, fitspiration, and bonespiration imagery on social media. *Journal of
Eating Disorders, 5*, 40. https://dx.doi.org/10.1186/s40337-017-0170-2

Thompson-Brenner, H., Boisseau, C. L., & Paul, M. S. S. (2011). Representation of ideal
figure size in Ebony magazine: A content analysis. *Body Image, 8*, 373-378.
https://dx.doi.org/10.1016/j.bodyim.2011.05.005

Tiggemann, M., & Zaccardo, M. (2015). "Exercise to be fit, not skinny": The effect of
fitspiration imagery on women's body image. *Body Image, 15*, 61-67.
https://dx.doi.org/10.1016/j.bodyim.2015.06.003

Tiggemann, M., & Zaccardo, M. (2018). 'Strong is the new skinny': A content analysis of
#fitspiration images on Instagram. *Journal of Health Psychology, 23*, 1003-1011.
https://doi.org/10.1177/1359105316639436

Tylka, T. L. (2012). Positive psychology perspectives on body image. In T. F. Cash (Ed.),
Encyclopedia of body image and human appearance (Vol. 2, pp. 657-663). San
Diego, CA: Academic Press.

Tylka, T. L. (2018). Overview of the field of positive body image. In E. A. Daniels, M. M.
Gillen & C. H. Markey (Eds.), *The body positive: Understanding and improving body
image in science and practice* (pp. 6-33). New York, NY: Cambridge University
Press.

Tylka, T. L., & Iannantuono, A. C. (2016). Perceiving beauty in all women: Psychometric
evaluation of the Broad Conceptualization of Beauty Scale. *Body Image, 17*, 67-81.
http://dx.doi.org/10.1016/j.bodyim.2016.02.005

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

Tylka, T. L., & Wood-Barcalow, N. L. (2015b). What is and what is not positive body

image? Conceptual foundations and construct definition. *Body Image, 14*, 118-129.

https://dx.doi.org/10.1016/j.bodyim.2015.04.001

Wasylkiw, L., Emms, A., Meuse, R., & Poirier, K. (2009). Are all models created equal? A

content analysis of women in advertisements of fitness versus fashion magazines.

Body Image, 6, 137-140. https://doi.org/10.1016/j.bodyim.2009.01.005

Webb, J. B., Vinoski, E. R., Bonar, A. S., Davies, A. E., & Etzel, L. (2017a). Fat is

fashionable and fit: A comparative content analysis of Fatspiration and Health at

Every Size® Instagram images. *Body Image, 22*, 53-64.

https://doi.org/10.1016/j.bodyim.2017.05.003

Webb, J. B., Vinoski, E. R., Warren-Findlow, J., Padro, M. P., Burris, E. N., & Suddreth, E.

M. (2017b). Is the "Yoga Bod" the new skinny?: A comparative content analysis of

mainstream yoga lifestyle magazine covers. *Body Image, 20*, 87-98.

https://doi.org/10.1016/j.bodyim.2016.11.005

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.

https://dx.doi.org/10.1016/j.bodyim.2015.03.010

Weinstein, E. (2017). Adolescents' differential responses to social media browsing: Exploring

causes and consequences for intervention. *Computers in Human Behavior, 76*, 396-

405. https://dx.doi.org/10.1016/j.chb.2017.07.038

Wick, M., & Harriger, J. (2018). A content analysis of thinspiration images and text posts on

Tumblr. *Body Image, 24*, 13-16. https://dx.doi.org/10.1016/j.bodyim.2017.11.005

Wiederhold, B. K. (2018). The tenuous relationship between Instagram and teen self-identity.

Cyberpsychology, Behavior, and Social Networking, 21, 215-216.

https://dx.doi.org/10.1089/cyber.2018.29108.bkw

Williams, L., & Williams, R. (2017). *13 body-positive influencers you should follow on Instagram*. Retrieved from https://www.instyle.com/reviews-coverage/social-media/body-positive-influencers-instagram-follow

Williamson, G., & Karazsia, B. T. (2018). The effect of functionality-focused and appearance-focused images of models of mixed body sizes on women's state-oriented body appreciation. *Body Image, 24*, 95-101. https://doi.org/10.1016/j.bodyim.2017.12.008

Wood-Barcalow, N. L., Tylka, T. L., & Augustus-Horvath, C. L. (2010). "But I like my body": Positive body image characteristics and a holistic model for young-adult women. *Body Image, 7*, 106-116. https://dx.doi.org/10.1016/j.bodyim.2010.01.001