Self-Presentation by Young Ballet and Contemporary Dancers on Image-Based

Social Media

Sarah Ann Morrow

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Abstract

The impact of social media use on young peoples' body image is gaining increased attention both in academia and in the media. Far less consideration has been given to whether young people emulate body image ideals in their online visual self-presentation. This study examined the online self-presentation of a group who may be vulnerable to body image difficulties, young dancers. Forty-seven contemporary dancers and twenty-four ballet dancers took part in the study. Participants' most recent five images on Instagram were screen-captured and content analysed. In addition, participants completed a brief survey comprising measures of Instagram use, self-objectification, body surveillance, eating disorder psychopathology and depression.

There were no differences between dance genres in their conformity to idealised body image in their self-presentation. However, the dance groups differed in objectifying behaviour, as contemporary dancers demonstrated more sexually objectified images and ballet dancers posted more images that focussed on a body part instead of their face. In terms of audience reaction to idealised/non-idealised content, there were no differences in positive feedback between image-type and dance genre. However, regression analyses highlighted positive relationships between number of 'likes' and proportion of idealised and objectifying images posted. Finally, no significant relationships were established between features of self-presentation/Instagram use and assessments of self-objectification, body surveillance, eating disorder psychopathology and depression. All dancers also showed low levels of psychopathology across all measures. This study can offer young dancers and dance schools an insight into the visual self-presentation practices of young dancers. Instagram provides them with a constructive venue for identity expression. However, some of this aligns with idealised body shape or objectifying appearance, which should

be considered. Results also invite more optimism and fewer negative preconceptions regarding body image in young dancers.

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List of Abbreviations

AI: Appearance-ideal

BSS: Body Surveillance Scale

EDE-QS: Eating Disorder Examination Questionnaire-Short Form

PHQ-2: Patient Health Questionnaire-Short Form

SNSs: Social networking sites

SO: Self-objectification

SOQ: Self-Objectification Questionnaire

1. INTRODUCTION

A large proportion of research highlights that ballet dancers are regarded as an 'at risk' group for developing body image disturbances and related eating disorders, due to the emphasis typically placed on aesthetic appearance within the ballet community (Ravaldi et al., 2006, 2003). Much of the dance and body image literature has treated dancers as a homogenous group and has neglected to examine whether similar findings would be found in dance forms that placed less importance on, and display of, a thin body shape, e.g. contemporary dance. There is strong evidence supporting the relationship between highly visual social media use and body image concerns amongst young people (Ahadzadeh, Sharif, & Ong, 2017; Marengo, Longobardi, Fabris, & Settanni, 2018; Sherlock & Wagstaff, 2018; Turner & Lefevre, 2017). However, research into specific manifestations of body image concerns (i.e. self-presentation) for vulnerable groups of young people (i.e. young dancers) on image-based social media is distinctly absent. This research examines how young ballet and contemporary dancers present themselves on the image-based social networking site Instagram.

2. LITERATURE REVIEW

2.1. What is Social Media?

Social media, often referred to as Social Networking Sites (SNSs), can be broadly defined as websites and applications that allow users to share content with networks they have self-constructed, i.e. friends, followers etc. (Pittman & Reich, 2016). Put plainly, it can be any form of computer-mediated communication where individuals can set up personal profiles, generate content of their own and view and/or interact with content of other online users. SNSs usually involve the development and maintenance of online relationships, which can be both personal and professional (Alhabash & Ma, 2017). A host of social media platforms have propagated over the years, including Facebook, Instagram, Snapchat, Twitter, and YouTube.

Although SNSs attract users of all ages, the use of social media is much more ubiquitous amongst young people than older generations. For instance, in 2018 it was found that young online Americans aged between 18 and 24 were the most frequent users of SNSs; with 80% of this age group using Facebook, 78% using Snapchat and 71% using Instagram (Smith & Anderson, 2018). Similarly, a recent report in England identified that on average, 16-24 year olds spent two hours twenty-six minutes per day using social media in 2016, noticeably higher than the average time spent by all adults, which was one hour sixteen minutes (Frith, 2017). While Facebook remains popular and continues to reign as the most used SNS across all generations, evidence suggests that use of more contemporary forms of social media, such as Instagram and Snapchat, is particularly increasing for teenagers and young adults (Duncan, 2016; Sulleyman, 2017). Specifically, there is now a dominance of image-sharing SNS use among young people (Choi & Sung, 2018).

Instagram was launched in 2010 and capitalises on the visual facet of social

media by allowing users to share photos and videos via mobile devices. Its most avid users are those between the ages of 18 and 29 (Cramer & Inkster, 2017; Kleemans, Daalmans, Carbaat, & Anschütz, 2016). Recent statistics indicate that Instagram has grown rapidly since its inception and now has more than one billion active monthly users, a figure that is projected to surpass one hundred and eleven million in 2019 (Statista, 2018). Over ninety-five million photos and videos are posted to Instagram per day (Dumas, Maxwell-Smith, Davis, & Giulietti, 2017).

Like Facebook, Instagram provides users with instant feedback in the form of likes and comments, allowing users to measure the impact and popularity of their posted content in numerical terms (Ging & Garvey, 2017). The developers of Facebook also own Instagram, which might account for similarities across both platforms. Nonetheless, some features make Instagram distinct from Facebook and other SNSs, such as newly posted content *only* permitting photos or videos, having options to enhance or beautify photos before posting them with an array of available filters, and users having options to 'like' others' shared content by tapping a heart icon (Lup, Trub, & Rosenthal, 2015). Although Instagram has emerged as one of the most popular photo sharing applications worldwide, it has received little academic attention (Hu, Manikonda, & Kambhampati, 2014; Lupinetti, 2015). Noticeably however, Instagram and social media more broadly is increasingly dominating media headlines across the globe for its impact on young users (BBC, 2017; Frazer-Carroll, 2018; Holliday, 2017; Howard, 2019).

2.2. Functions and Impact of Social Media for Young People

Research suggests that social media can be either positive or potentially damaging to a young person's mental health and well-being. On the one hand, social

media can have various benefits for young people. Firstly, it can allow for friendships and relationships to be developed and maintained, with evidence suggesting that adolescent friendships can be enhanced through use of social media (Lenhart, Smith, Anderson, Duggan, & Perrin, 2015). Secondly, it can provide access to emotional support where online communities and networks can be built. Research has found that nearly seven in ten teens reported receiving support on social media during tough or distressing times (Cramer & Inkster, 2017). Additionally, findings have suggested that the private messaging function on most SNSs can allow for easier self-disclosure for socially anxious young adults, potentially leading to an increase in confidence in themselves and others (Green, Wilhelmsen, Wilmots, Dodd, & Quinn, 2016). Evidence also suggests that regular engagement on SNSs can increase feelings of social connectedness and belonging for teenagers (Quinn & Oldmeadow, 2013); particularly with such sites providing an opportunity to join 'groups' or 'pages' for communities that may otherwise be minorities in the real world.

Thirdly, it can be a space for young people to discuss health experiences with same-age peers. Research states that young people with mental health difficulties are heavier users of social media but are traditionally difficult to engage in health issues. Therefore, it is argued that taking health messages to interactive spaces that young people frequent, via signposting and perhaps even online access to professionals, could provide invaluable support to the young people who need it (Elmquist & McLaughlin, 2018; Wong, Merchant, & Moreno, 2014). Regarding Instagram, it was found that the platform shows good potential as a source of public health information (Muralidhara & Paul, 2018), whereby networks and 'pages' exist across a range of health topics to share and explore these issues. Lastly, social media can allow for teenagers and young adults to express themselves and build and shape an online

identity, which can promote individualisation and confidence during a time when young people are continuing to develop their sense of self (Cramer & Inkster, 2017).

Conversely, there is literature that has raised concerns about the potential detrimental effects frequent social media use is having on young people. The Office for National Statistics (2015) found that there is a "clear association" between excessive social media use and mental health problems amongst younger users. In support of this, research has found that young people who spent more than two hours a day on sites like Facebook, Twitter and Instagram reported higher levels of psychological distress and suicidal ideation (Sampasa-Kanyinga & Lewis, 2015). Markedly, recent systematic and narrative reviews have examined empirical research relating to psychological and emotional implications of using SNSs. Collectively, they reviewed seventy-five studies that had been published between the years 2000 and 2017 and established that findings often yielded positive associations between social media use and mental health difficulties amongst young people, such as depression, anxiety and loneliness (McCrae, Gettings, & Purssell, 2017; Olson et al., 2018). The reviewed studies commonly suffered from methodological flaws, such as a heavy reliance on correlational designs and a lack of longitudinal and experimental research, which limits conclusions that can be drawn on the directionality and duration of effects. Research also often varied in the tools and instruments used when measuring symptomology and psychopathology. Even so, most studies had adequate to large sample sizes and there was a level of consistency in statistically significant findings across the research, which enhances confidence in the generalisability of results across the younger generation.

In addition to the breadth of existing research in this area, a recent U.K.-wide public health study by Cramer and Inkster (2017) concluded that platforms which are

supposed to help young people connect with each other may actually be fuelling a mental health crisis. In their study of 1,479 youngsters aged between 14 and 24, they found that four out of five SNSs commonly used by those in this age range (Facebook, Instagram, Snapchat and Twitter) contributed towards feelings of anxiety and depression in young users. They also found other harmful effects of social media use on young people such as poor sleep, cyberbullying, fear of missing out (FoMo) and negative body image. The photo-sharing platform Instagram was ranked the worst social media network in relation to its impact on the mental health of young people and was most likely to cause users to feel depressed, lonely and anxious. Other research has also specifically linked Instagram use with poor psychological outcomes such as a higher likelihood of depression, anxiety, negative social comparison and low self-esteem (Bruner, 2018; Lup et al., 2015; Sherlock & Wagstaff, 2018).

But what makes Instagram such a source of mental strain on young people in comparison to other SNSs? It is argued that the endless barrage of images that feature on the site, function as a person's "highlight reel", rather than a true reflection of their day-to-day life. For this reason, Instagram is uniquely poised to create unrealistic expectations, feelings of inadequacy and low self-esteem as a result of comparing the quality of one's own life with that of others (Wiederhold, 2018). Other researchers assert that excessive use of photo-sharing sites may give rise to negative mental health consequences as a result of social comparisons, FoMo and an unhealthy desire to attain external validation from peers (Magner, 2018). Most notably, there is an abundance of idealised depictions of beauty and body shapes that permeate Instagram, which may help to explain why a growing body of research has linked increased general use of the site with a higher prevalence of body image concerns and/or eating disorder psychopathology amongst the younger age group (Ahadzadeh et al., 2017; Marengo

et al., 2018; Sherlock & Wagstaff, 2018; Turner & Lefevre, 2017).

2.3. Social Media, Body Image and Eating Disorders in Young People

Body image can be described as an individual's mental representation of the size, shape and form of their bodies and the feelings concerning characteristics of their body, including facial appearance (Pollatou, Bakali, Theodorakis, & Goudas, 2010). Body image dissatisfaction can be defined as the negative attitude towards one's own body resulting from a perceived incongruity between one's actual body image (i.e. thoughts and feelings regarding one's actual physical appearance) and one's ideal body image (i.e. internalised ideals concerning one's physical appearance; Heider, Spruyt, & De Houwer, 2018). Body image plays a prominent role in adolescent development and wellbeing, as those who experience a high level of body dissatisfaction during this period are at an increased risk of developing mental health problems including depression and anxiety (Markey, 2010). Importantly, body dissatisfaction is also one of the most reliable and robust risk factors for eating disorders (Stice, 2002). Body image can be an issue for both male and female young people, but particularly for females in their teens and early twenties. Concerningly, dissatisfaction with one's appearance and physique is now considered a normative occurrence among young women in western society (Fardouly, Pinkus, & Vartanian, 2017).

On a daily basis, individuals from western societies are bombarded with implicit and explicit messages surrounding idealised versions of body shape and appearance, primarily delivered via media outlets. For women, these messages often endorse unattainable beauty ideals of glamorous, and often photo-shopped women, who are generally young, tall, moderately breasted, have flawless skin and are

extremely thin (Grabe, Ward, & Hyde, 2008). For men, these unrealistic body ideals tend to depict an ultra-lean muscular physique with very low body fat (Dakanalis, Carrà, et al., 2015). Over the past century, markets in industrialised countries (e.g. insurance, fashion, food, pharmaceutical etc.) began promoting thin bodies as the ideal body shape, particularly for women. Consequently, western society formed an aversion to larger body types and ultra-slender physiques became associated with beauty, health and happiness (Hepworth, 1999). In non-westernised cultures however, assumptions surrounding idealised appearance continue to considerably differ. For example, for individuals from African cultures or heritage, thinness is commonly associated with hunger, poverty and illness and a more voluptuous, fuller figure often constitutes an idealised and sought-after appearance. This is because in such cultures, this body type tends to connote sexuality, authority and wealth (Warren, Gleaves, Cepeda-Benito, Fernandez, & Rodriguez-Ruiz, 2005). However, Swami (2013) highlighted that increasing industrialisation and modernisation means there are more forces that promote westernised body image ideals. Consequently, there is now greater globalisation of the 'thin-ideal' than ever before. One force that has strongly contributed towards this is the power of the mass media in urban populations.

For years, images of western body ideals have infiltrated traditional forms of mass media in industrialised societies, such as television, women's fashion magazines and men's fitness magazines. There is a large literature on the effects that mass exposure to traditional media has on body image concerns and the disordered eating patterns of young people, predominantly young women (Adam, 2017; Grabe et al., 2008; Levine & Murnen, 2009). The heightened focus on females in this area may echo gender discrepancies in everyday exposure to these cultured ideals, as research has established that appearance norms encountered by women in daily life are more

rigid, homogenous and pervasive than those for men. In turn, this was found to be more harmful to body image than more heterogeneous, flexible norms that are typically encountered by males (Buote, Wilson, Strahan, Gazzola, & Papps, 2011). Nonetheless, the pressure for young men to attain the perfect body is rising ever closer to that met by young women, particularly since the ascension of SNS use by young people (Grogan, 2016). The introduction of social media permits an easier, faster and inexhaustible distribution of these sociocultural messages pertaining to body image. Hence, findings surrounding the impact of such are being increasingly replicated for the extensive use of SNSs by teenagers and young adults (Fardouly & Vartanian, 2016; Mabe, Forney, & Keel, 2014; Santarossa & Woodruff, 2017).

Holland and Tiggemann (2016) and Fardouly and Vartanian (2016) conducted systematic reviews of extant literature and found that use of SNSs was associated with higher rates of body image disturbance and disordered eating in young people. However, whilst these findings are noteworthy, the majority of studies reviewed focussed on females, making it difficult to generalise findings across genders. Most were correlational and cross-sectional in design, thus providing no method of determining causality and no way of establishing a temporal relationship between exposure and outcome. Although there were some exceptions, e.g. Meier and Gray (2014), most studies tended to use broad measures of SNS use, such as total time spent on social media. This is less informative given the wide range of features and functions available on these sites, e.g. posting photos and videos, status updates, lurking and private messaging. Furthermore, most of the studies investigated Facebook use only, with no studies investigating the image-based SNS Instagram.

The proliferation of picture-based social media facilitates young people to compare their own body appearance with that of others (Fardouly et al., 2017). In turn,

this may further enhance the likelihood of negative body image and related eating difficulties (Santarossa & Woodruff, 2017). In contrast to other highly-visual social media (e.g. Snapchat) where availability of content is ephemeral (time-limited), Instagram content is persistently available. This distinction is important to highlight as there are some who argue that continuously available content on SNSs serves to heighten appearance and online self-presentational concerns in young people (Bayer, Ellison, Schoenebeck, & Falk, 2016). Importantly, this difference has been found to impact how the sites are used amongst this age group (Choi & Sung, 2018), which will be elaborated upon in a later section.

While some research has focussed on overall use of Instagram (i.e. frequency of visiting the site) when examining the impact on young users, some research has investigated specific Instagram activity in relation to its impact on body image-related difficulties for this population, particularly viewing publicly-searchable pages that focus on idealised physiques for men and women. On social media, images of body ideals have been used to form SNS subcultures such as '#thinspiration' and '#fitspiration'. Thinspiration is 'thin-ideal' imagery that intentionally promotes weight loss, often in a way that glorifies behaviours that are typical of eating disorders. Likewise, fitspiration is imagery that ostentatiously encourages users to be very fit, often at unachievable levels. It also tends to focus on the promotion of appearance-related rather than health benefits of diet and exercise. Researchers have found that that this type of social media content serves to perpetuate pervading sociocultural ideals for men and women, whilst commonly sexually objectifying the 'thin-ideal' and the 'fit' body, and often positioning extreme dietary restriction and exercise as means to achieve these ideals (Boepple, Ata, Rum, & Thompson, 2016; Boepple & Thompson, 2016; Deighton-Smith & Bell, 2018; Ghaznavi & Taylor, 2015; Norton,

2017; Talbot, Gavin, Van Steen, & Morey, 2017).

In contrast to other social media research, most 'fitspiration' and 'thinspiration' content is found on, and disseminated, via Instagram (Deighton-Smith & Bell, 2018; Ging & Garvey, 2017; Norton, 2017; Tiggemann & Zaccardo, 2016). This raises concerns for the effect this content may have on its most popular users - young people. Some research has found that viewing such content *did not* predict body dissatisfaction (Jones, 2017) and others documented some positive effects, such as feeling inspired to pursue personal fitness goals (Easton, Morton, Tappy, Francis, & Dennison, 2018). However, the methodology of both studies, i.e. surveys, interviews and focus groups, suffer from limitations as all produce data that may be subject to self-report bias. Most patently, this research is outweighed (in frequency and quality) by preliminary experimental research which has found that acute exposure to such material, heavily sourced from Instagram, can lead to increased body dissatisfaction in young men and women (Fardouly, Willburger, & Vartanian, 2018; Fatt, Fardouly, & Rapee, 2019; Prichard, McLachlan, Lavis, & Tiggemann, 2018; Robinson et al., 2017; Sumter, Cingel, & Antonis, 2018; Tiggemann & Zaccardo, 2015) and greater symptom severity amongst young adults with eating disorders (Barlow et al., 2018).

An additional strength of this research is that much of it has further investigated factors that may mediate or moderate the relationship between exposure to this content and negative consequences for body image-related variables. That is, factors that may help explain how or why there is a relation between predictor and criterion variables (*mediator variable*) and factors that affect the strength of the relation between the two variables (*moderator variable*). For instance, Sumter et al. (2018) found that internalisation of the thin-ideal moderated the relationship between viewing fitspiration content and body dissatisfaction for young women. Similarly, Fatt et al.

(2019) found that greater muscular-ideal internalisation and appearance comparison tendency mediated the relationship between exposure to fitspiration material and less body satisfaction for young men. Other research also identified increased physical appearance comparisons as a mediator variable of both thinspiration and fitspiration exposure and symptom severity in young adults with eating disorders (Barlow et al., 2018).

The impact of other Instagram activity on young users' physical self-perception, aside from viewing fitspiration and thinspiration content, has also been explored. For example, it was found that appearance-focussed Instagram use (namely following appearance-focussed accounts) was associated with thin-ideal internalisation, body surveillance and drive for thinness in young women (Cohen, Newton-John, & Slater, 2017). Similarly, engagement in photo-based activities on Instagram, e.g. browsing, commenting on, tagging and 'liking' photos of others, was found to positively predict both drive for thinness and body dissatisfaction through the mediating variable of appearance-related comparisons for young women (Hendrickse, Arpan, Clayton, & Ridgway, 2017). In addition, other findings suggest that young adult female Instagram users who highly invest in audience responses to their self-images, via 'likes' and comments, are more likely to exhibit disordered eating attitudes and intentions (Butkowski, Dixon, & Weeks, 2019). Whilst these descriptive studies are promising, a recent surge in experimental evidence has strengthened this area of research.

Young peoples' investment in appearance-focussed imagery and content has been the focus of much of the experimental studies in this area. For example, it was found that increased exposure to 'attractive' celebrity and peer photos (Brown & Tiggemann, 2016) and to manipulated or appearance-enhanced Instagram photos

(Kleemans et al., 2016) was detrimental to young women's body image. In support of this, other research found that viewing thin-ideal imagery that had been digitally altered (not specifically thinspiration content) on Instagram had a negative influence on young women's body image, irrespective of whether disclaimer comments were attached to indicate this enhancement (Fardouly & Holland, 2018). Similar results were observed in a study by Tiggemann, Hayden, Brown and Veldhuis (2018), who additionally discovered that increased exposure to thin-ideal content led to less facial satisfaction than average images. Likewise, Fardouly and Rapee (2019) examined the impact of viewing images of women who were wearing makeup and those who were not on young women's body image, akin to those found on makeup artist Instagram accounts. They found that participants in the 'makeup' condition were less satisfied with their facial appearance and were more motivated to change aspects of their face, hair and skin after exposure to the study images.

Other research has focussed on young peoples' exposure to appearance comments on attractive images featured in Instagram and found greater body dissatisfaction when viewing these comments in contrast to those made on pictures of places (Tiggemann & Barbato, 2018). Alternatively, Cohen, Fardouly, Newton-John and Slater (2018) studied exposure to body positive posts in the form of quotes, images and captions of women proudly displaying larger bodies. They demonstrated improvements in young women's mood, body satisfaction and body appreciation relative to thin-ideal and appearance-neutral posts.

These experimental studies build on existing research as they have better internal validity than descriptive studies and more inferences can be made on the direction of causality, i.e. they are more indicative of how exposure to Instagram content increases body image concerns in young people, particularly those present at

the outset. Generally speaking, this area of research is an important advancement towards understanding not only the effect that image-based social media might be having on the younger generation, but also how these difficulties may be foreseen through their specific online activity – particularly regarding the content they devote attention to. Nevertheless, literature in this area remains in its infancy and continues to primarily focus on females. Research investigating how body image-related concerns might be revealing in the broader online presence of young people on Instagram, i.e. via photo-based activities and uploads, is scarce. This is an important area to build on, as researchers have argued that those who actively distribute images that clearly align with extreme attitudes towards body ideals are likely to increase their commitment to, and internalisation of these ideals. This, in turn, can contribute to a multitude of problems including body dissatisfaction and disordered eating attitudes (Ghaznavi & Taylor, 2015; Holland & Tiggemann, 2017). Relatedly, one area of specific online activity that is building academic intrigue is how teenagers and young adults present themselves on image-based social media and how this may relate to an individual's feelings about their body.

2.4. Self-Presentation

Self-presentation and identity formation can be seen in the historical art of portraiture. While portraits were concerned with likenesses in a person's physical features, they also often represented the person's 'inner essence' such as their social standing, personal characteristics, virtues and psychological state. For example, paintings of monarchs and those very high in social status were often depicted in a powerful standing pose, wearing richly decorated dress and jewels, straight lipped and stern-faced to portray superiority, affluence and greatness (West, 2004). Portraits were

filled with the external indications of a person's socialised self, or what Goffman (1959) termed the 'front' of an individual.

The passing of centuries has seen an evolution in the portrayal of individuals in the form of photography. In the analogue age of photographs, personal photography was primarily a means for autobiographical remembering and photographs typically consisted of family settings and occasions. However, even in this era, pictures of such settings traditionally involved constructing images as one wished others to see them. For instance, these photographs would hardly ever consist of friends or family members arguing, painful experiences or unhappy people. Whilst photographs have long been a means of constructing family, cultural and individual identities as they appear to others, digital photography has created a new chapter in how one can construct a positive or idealised image of oneself (Sarvas & Frohlich, 2011).

The boundless potential of digital imagery to manipulate one's self-image make it the ultimate tool for reinventing one's self-appearance. With these newer opportunities in photography available, the individual, as opposed to family settings, has increasingly become the focus of pictorial life. Therefore, the introduction of the new digital age of photography has gradually seen its key function change from a tool for reminiscence to one for identity formation, communication and self-expression. Self-presentation is now a major function of photographs (Van Dijck, 2008).

Theories of self-presentation and impression management propose that individuals attempt to control their image and identity to engender a positive impression of themselves in social situations (Herring & Kapidzic, 2015). Ervin Goffman's (1959) dramaturgical impression management theory is perhaps the most eminent of all self-presentation theories. Through use of performance analogy, he likened life as a stage for activity and posited that people functioned as 'actors' with a

goal to display a credible image of themselves to others. This usually involved individuals accentuating or suppressing certain aspects of the self, depending on the context of the situation. He described self-presentation to consist of both frontstage and backstage performances. Front stage performances involve oneself being guarded and cautious of the 'self' that is presented, exhibiting a 'polished' or perfected version determined by a person's role (Hogan, 2010). Roles of people and their audience are flexible because people have their own experiences that influence their perceptions of society (Manning, 1992). Alternatively, backstage performances involve a more candid depiction of the 'self' that is less scripted and less filtered. These would take place when either no audience or a more familiar audience is present (Reichart Smith & Sanderson, 2015).

Similarly, Baumeister and Hutton (1987) theorised that self-presentation is generally driven by two types of motives. The first is to make a favourable impression on others ('pleasing the audience'), and the second to match an impression that resembles an idealised version of oneself ('self-construction'). Other theorists, however, have argued that people are also driven to present themselves in a way that is congruent with their perception of their authentic selves to gain acceptance and approval (Higgins, 1987). Self-presentation is therefore steered by the pressure of creating an idealised image whilst painting an accurate picture. Thus, identity management requires sensitive navigation, particularly if it is to conform to the norms and expectations of society and important others.

Although most self-presentation theories were originally based on face to face interaction, some, such as Goffman's (1959), have since been applied to online environments (Bullingham & Vasconcelos, 2013; Geurin-Eagleman & Burch, 2015; Lupinetti, 2015). Whilst it has been argued that Goffman's work is outdated and in

need of remodelling (Arundale, 2010), others have found that Goffman's original framework is of great usefulness for understanding the presentation of self on social media (Bullingham & Vasconcelos, 2013; Hogan, 2010; Hum et al., 2011). These studies have generally found support for both genders engaging in a variety of 'front stage' strategies to project a version of their 'ideal' self. A recent review of the theory and its application to digital environments also concluded that interactions which take place in an online context could be deepened with an enhancement of Goffman's theory (Serpa & Ferreira, 2018). Moreover, Bullingham and Vasconcelos (2013) found support for Higgins' (1987) theory when applied to social media in that participants were keen to recreate their offline-self online, but engaged in editing aspects of the self. They emphasised that this ultimately provided support for the key premise in Goffman's work, as when in 'front stage', people deliberately chose to project a given identity.

However, studies exploring Goffman's philosophy and how this relates to sociocultural roles of body image, or more specifically, online self-presentation of young people more vulnerable to body image concerns, are missing. Most studies connecting Goffman's work to online self-presentation have focussed on older forms of social media such as Facebook and blogs, which rely largely on written content for communication and self-expression (Bullingham & Vasconcelos, 2013; Hewitt & Forte, 2006; Mendelson & Papacharissi, 2010; O'Leary & Murphy, 2018). Research specifically connecting this theory to young people, body image and self-presentation on Instagram is limited and from a qualitative paradigm (Chua & Chang, 2016; Mascheroni, Vincent, & Jimenez, 2015). One concept, however, that complements Goffman's ideas of presenting an idealised version of the self, that has been increasingly applied to online environments and that focusses exclusively on body

image, is self-objectification.

2.5. Self-Objectification

Objectification theory (Fredrickson & Roberts, 1997) was derived from traditional feminist theories of body image and eating concerns and supports a socially constructed idealised version of the female physique. The theory proposes that women in western societies are frequently sexually objectified in both interpersonal situations and media-based contexts. Examples of sexually-objectifying situations include leering, sexually suggestive comments and exposure to highly sexualised media images of women (Schaefer et al., 2018). Over time, women who encounter recurrent sexual objectification start to depersonalise themselves and view and treat their body as an object for others' consumption and judgement. The propensity to do this, and to value one's external appearance over internal experience, is a perspective known as self-objectification - SO (Rodgers, 2016). Heightened SO often behaviourally manifests in body surveillance, or the habitual monitoring of one's own appearance. Hence, individuals monitor their compliance with gender-specific sociocultural body image ideals to avoid negative judgments from others (Dakanalis, Carrà, et al., 2015). Accordingly, individuals may use body surveillance to determine how other people will perceive and treat them (Claudat, 2013).

Prior literature commonly reflects two approaches to operationalising SO. The first refers to experimentally heightened SO, or *state* SO, which involves temporally activating objectification by exposing participants to sexually objectifying content and then evaluating the impact of this on criterion variables. The second refers to self-reported SO, or *trait* SO, which includes the use of self-report measures to assess participants' perceived importance of appearance versus competence-based body

attributes (Huang & Moradi, 2008). A large body of existing experimental and correlational research, examining both state and trait SO, supports proposed associations between SO and a range of body image concerns and restricted eating behaviour (Calogero, 2011; Huang & Moradi, 2008; Schaefer & Thompson, 2018; Tiggemann, 2013)

Although much of the SO research focusses on its application to females, more recently it has been acknowledged that there are also sociocultural forces that promote the sexual objectification of men. Thus, while still underdeveloped, the construct of SO as it applies to males is increasingly being explored (Calogero, 2009; Fox & Rooney, 2015; Martins, Tiggemann, & Kirkbride, 2007). SO is particularly relevant to young people of both genders considering their vulnerability to societal pressures and norms. Findings relating to this age group are much like those observed in the wider population, in that they have shown that increased levels of trait and state SO is associated with depressive symptoms, negative body feelings and eating disorder psychopathology (Dakanalis et al., 2015; Muehlenkamp & Saris-Baglama, 2002; Quinn, Kallen, & Cathey, 2006; Tiggemann & Slater, 2015). Much of this research, however, again concentrates on young women. Still, given its relevance to the younger generation, it is not surprising that the construct of SO has become a popular topic of interest in the realm of social media research.

Both conventional and social media feature content with high levels of sexually objectifying imagery, commonly these are images that over-value a person's body parts and sexual function (Ward, Seabrook, Manago, & Reed, 2016). This is often achieved by depicting women, relative to men, as body parts dismembered from the body, with their faces obscured or omitted, wearing revealing clothes, exposing more skin and adopting more seductive poses (Aubrey & Frisby, 2011; Bell, Cassarly,

& Dunbar, 2018). Recent meta-analytic research investigated the influence of sexualising media use on SO among men and women. The data revealed a positive moderate effect of all types of sexualising media on SO, however found that use of video games and/or online media led to stronger SO effects when compared to television use (Karsay, Knoll, & Matthes, 2018). These findings perhaps reflect the degree of objectifying imagery (particularly involving women) that has been found to feature on social media via content analytic research (Deighton-Smith & Bell, 2018; Ghaznavi & Taylor, 2015; Tiggemann & Zaccardo, 2016). In light of this, studies focussing explicitly on SNS use, namely Facebook, and its association with increased levels of SO in young men and women were only to be expected (Fardouly, Diedrichs, Vartanian, & Halliwell, 2015; Hanna et al., 2017; Manago, Ward, Lemm, Reed, & Seabrook, 2015; Meier & Gray, 2014; Trekels, Ward, & Eggermont, 2018).

Markedly, these findings are being ever more emulated for Instagram, where sexualised imagery is more heavily trafficked. For example Fardouly et al. (2018) found that greater overall Instagram use was associated with increased SO in young women, which was mediated by internalisation of the thin-ideal and by appearance comparisons to celebrities. Similarly, Feltman and Szymanski (2018) found that internalisation of cultural standards of beauty and engaging in upward appearance comparisons, or seeing one's appearance as inferior to a comparative figure's, uniquely mediated Instagram usage and SO and body surveillance links in young adult women. Other research has supported the correlational association between Instagram use and state SO and further found a positive relationship between state SO and a host of negative consequences for young women's mental health (Liu, 2018).

This research is important as it allows for a growing insight into how social media use can impact upon a young person's SO, or more generally, the value they

place on their physical appearance. It also makes it reasonable to see why self-objectifying individuals might be drawn to social media platforms, as they provide perfect arenas for exhibiting self-objectifying behaviours, or behaviours which they believe would help present a sought-after image to others. What it doesn't illustrate, however, is how self-objectifying behaviours may present on highly visual social media for young people, particularly for those who are already vulnerable to body image concerns.

2.6. Online Self-Presentation, Young People and Body Image

There are several features within SNSs that can contribute to a young person's overall online portrait. Content can be generated by the user (e.g. pictures, status updates, nametags and hashtags), by friends (e.g. comments and 'likes'), and by the system (e.g. number of followers and number of photos; (Ong et al., 2011). For teenagers and emerging adults, self-presentation is crucial during this self-developmental period, and the need to strategically control the information they display online becomes increasingly vital (Yang & Bradford Brown, 2016). Online self-presentation, therefore, enables young users to be selective in the 'selves' they wish to portray to others, often only posting content that paints a desirable image (Mendelson & Papacharissi, 2010).

Most previous research on young peoples' online self-presentation has focussed on text-heavy media such as Facebook, Twitter, MySpace and less illustrious sites like Yik Yak (Chen & Marcus, 2012; Chu & Choi, 2010; Kapidzic & Herring, 2015; Manago, Graham, Greenfield, & Salimkhan, 2008; Michikyan, Dennis, & Subrahmanyam, 2014; Michikyan, Subrahmanyam, & Dennis, 2014; O'Leary & Murphy, 2018; Ong et al., 2011; Seidman, 2013). More recently however, academics

are increasingly exploring this area on visual-based social media. For example, Choi and Sung (2018) found that the type of 'self' a young person wished to display determined whether they used Snapchat or Instagram. Explicitly, the expression of true and actual selves, or what Goffman (1959) would describe as 'backstage' selves, were significant determinants for using Snapchat as the primary SNS. In contrast, the expression of the ideal self, or their frontstage self, was associated with active Instagram use. They ascribed the difference in functionality of the sites as the reason for this discrepancy. That is, Instagram affords a persistent archive wherein content continues to be visible to the public unless deleted by the user, as opposed to moment-to-moment time-limited sharing available on Snapchat. As a result of this affordance, individuals tend to avoid publicising an authentic version of themselves on Instagram and prefer to engage in self-presentation behaviours.

Several recent qualitative studies have also explored how young peoples' awareness of audience engagement with their posts impacts upon self-presentation practices on Instagram. Through focus group discussions, Yau and Reich (2018) found that teens who were developmentally able to perceive a situation from the third-person perspective and who valued peer approval, purposefully shared content to appear interesting, well-liked and attractive. Similarly, Balea, Velicu and Barbovschi (2018) drew from qualitative and survey data and found that the need for validation played a significant role in young people curating their online self-image. Other research also reflected the constraints of norms and practices regarding youth online self-presentation in an interview study, whereby eight young British women linked posting images of themselves as attempts to portray an image that was as close to 'ideal' as possible (Grogan, Rothery, Cole, & Hall, 2018); thus embedding the intention to produce a refined version of oneself to others.

The pressure for young people to present a tailored representation of one's life is so strong that some create "finstas" or "fake Instagrams" (Wiederhold, 2018). This is a new phenomenon which exemplifies the self-presentation practices of youngsters in a visual online world. Finstas are accounts reserved for a smaller and more selective circle of friends which display a relatively unfiltered view of a person's life. These could be things like unflattering 'selfies' (self-portraits taken by the user), random photos with friends and private confessions. Meanwhile, highly curated images and more socially appealing content go on their "rinstas" or "real" Instagram, which is tied to the identity they wish to project to the wider world. Preliminary research has confirmed these needs and motives for developing finstas, suggesting that the limited audience, the opportunity for self-disclosure and the source of validation they can provide encourage users to make finstas (Abrashi, 2018). Others have found that a more deceptive and impressive self is demonstrated on rinsta accounts, whereas finstas are used for fun daily updates and to bond socially with friends (Kang & Wei, 2019). Additionally, McGregor and Li (2019) discovered that more gossip, exhibitionism, risk-taking and other attention-seeking behaviours were associated with use of finstas. However, while this novel area of research offers a rising insight into the presentational behaviours of young people on Instagram, it only permits a generalised overview of the area and there is an absence of undivided focus on body image-related activity.

'Selfies' serve as rapid tools for impression management as they show viewers a controlled view of the ideal-self (Ma, Yang, & Wilson, 2017). In efforts to achieve this, they are often digitally manipulated to enhance appearance in photos (Reich, 2010). Successfully enhancing one's appearance on social media is considered by adolescents to be one of the most important skills for gaining popularity online (Siibak,

2009). However, excessively enhancing one's appearance can result in looking dishonest to offline social circles, reiterating Higgins' (1987) assertion about the importance of presenting a self that is not too dissimilar to the true self. Toma, Hancock and Ellison (2008) found support for this, when they examined online dating profiles and found that users danced a fine line between appearing idealised and appearing realistic. Other research has evidenced this effort and found that selfie-related behaviour is more complex than just posting; instead young people entertain a process involving meticulous selection and editing of these images prior to sharing them (Bij de Vaate, Veldhuis, Alleva, Konijn, & Van Hugten, 2018). Essentially, self-presentation on SNSs can be a delicate and multifaceted task (Rodgers, 2016).

Some research has explored the relationship between body-image associated variables and image editing of oneself on social media. For example, Mitchison et al. (2018) found that photo manipulation and concern about posting selfies may be risk correlates for body dissatisfaction in young men and women. Comparable findings were also seen in Instagram-specific research. Namely, Chua and Chang (2016) conducted a qualitative investigation into Singaporean school girls' engagement in self-presentation through editing and positing selfies on Instagram. They also explored ways in which peer comparison reinforced the media ideal of beauty. Results showed that teenage girls edited and manipulated their self-presentation to achieve the standard of beauty projected by their peers, whom they used as benchmarks for judging the appropriate level of editing. Peers played multiple roles that included judges, comparison targets and imaginary audiences. Importantly, they found that acts of self-presentation and peer comparison were driven by the desire to gain attention and validation. This was ultimately underpinned by the body image-related variables of insecurity and low self-esteem.

Studies investigating the relationship between body image dissatisfaction and *frequency* of posting selfies is limited and often contradictory in nature. For example, McLean, Paxton, Wertheim and Masters (2015) found that young girls higher in body dissatisfaction were more frequent in posting images of themselves. They also found that higher engagement in manipulation of these images was associated with greater body-related and eating concerns. Additional support for this comes from Cohen, Newton-John and Slater (2018), who found that greater investment in taking and sharing selfies was associated with higher levels of body dissatisfaction and eating disorder psychopathology in young women. In contrast, Ridgway and Clayton (2016) found that males and females more satisfied with their bodies were more likely to post images of themselves. Other studies have shown that body appreciation and self-esteem positively correlated with greater engagement in selfie selection and posting among young women (Veldhuis, Alleva, Bij de Vaate, Keijer, & Konijn, 2018; Wang et al., 2018). Furthermore, Wagner, Aguirre and Sumner (2016) detected no correlation between the frequency of selfies posted to Instagram by young women and body dissatisfaction. Noticeably however, these studies investigated a range of SNSs and varied in measures of body image concerns and social media use, which could help to explain inconsistencies in this area of self-presentation research.

2.6.1. *Objectified Self-Presentation in Young People*

As mentioned earlier, research specifically investigating how SO can manifest in online self-presentation is limited. Akin to research linking body dissatisfaction to specific self-presentation strategies, much of the SO research in this area has focussed on frequency of posting and/or editing self-images. For example, research has found that engagement in selfie behaviours, such as frequency of posting and editing, was

positively associated with SO among young females (Veldhuis et al., 2018; Zheng, Ni, & Luo, 2019). Fox and Rooney (2015) also found that SO predicted editing photographs of oneself prior to posting them on SNSs for men aged between 18 and 40. Furthermore, Cohen et al. (2018) found that trait SO moderated the relationship between young women's investment, effort, and concern regarding posting selfies on SNSs and eating disorder symptomology. These studies focussed on various SNSs but similar findings have been shown for Instagram, whereby photo manipulation and feelings of disingenuousness mediated the relationship between trait SO and feelings of depression in young women (Lamp et al., 2019). Nonetheless, this research relies solely on questionnaire data and does not provide insight into the relationship between SO and other types of objectified or sexualised self-presentation exhibited by young people.

Some research has addressed the presence of objectifying self-presentation on SNSs, primarily sexual objectification. For example, an analysis of the Facebook profiles of male and female undergraduate students not only revealed that 42-45% featured full-body shots and not just faces, but also found that 36–41% featured clothing that was revealing or highly revealing (Kapidzic & Martins, 2015). Additionally, in a study of 200 student Facebook profiles, it was found that 25% had semi-nude or sexually provocative photos (Peluchette & Karl, 2010). Ramsey and Horan (2018) also undertook a content analysis to examine the extent to which young women posted sexualised photos of themselves on SNSs. Interestingly, although on the whole they found that self-sexualisation was relatively low, they did find that women posted more sexualised photos of themselves to Instagram than Facebook. Scant research has considered how young people with high levels of trait SO present themselves visually to others. Of that which does exist, recent content analytic

research by Bell et al. (2018) focussed specifically on Instagram and found that trait SO predicted frequency of posting self-objectifying images on the site in young girls, with sexually suggestive poses being the most common form of SO.

In-line with objectification theory, the motivation to satisfy others' expectations or desires would explain why young people might strategically present themselves in a way that would paint a coveted, sexually available image. Evidence suggests that young girls are particularly preoccupied with looking 'sexy' in their online profiles (Chua & Chang, 2016; Manago et al., 2008; Mascheroni et al., 2015; Siibak, 2009). Several studies point to a tendency for female users to select images for self-presentation in which they are posing in a sexually suggestive manner, e.g. wearing unbuttoned or partially open clothing, winking, flirting, posing sexually and pouting while tilting their head suggestively to the camera (Bell et al., 2018; Ghaznavi & Taylor, 2015; Hall, West, & McIntyre, 2012; Kapidzic & Herring, 2011; Tiggemann & Zaccardo, 2016). In addition, most young girls' pictures present them looking up or sideways at the viewer – i.e. having an alluring gaze, at a closer distance to the camera and more seductively posed than their male counterparts (Kapidzic & Herring, 2011). This is in-keeping with magazine depictions of female models portrayed gazing up at the viewer out of the corner of their eyes, in a seductive, submissive manner (Goffman, 1979). At the same time, there is a growing trend for young male SNS users to present themselves as attractive and sexual, for example by showing their nude upper body (Birnholtz, 2018; Herring & Kapidzic, 2015; Manago et al., 2008). Boy's choices of images are more varied but commonly involve them being at a greater distance and looking away from the camera, or in a posture that denotes dominance or strength (Kapidzic & Herring, 2015; Kapidzic & Herring, 2011). However, research linking trait SO with objectifying or sexualised presentations in males is severely deficient,

making this a relatively unexplored area.

One factor that may be associated with presenting the self in objectifying ways on SNSs is the valence (emotional tone) of the audience reaction to such images via 'likes' and comments. Research has reliably demonstrated that behaviours require social validation in order to continue (Baumeister, 1999; Bell et al., 2018). Thus, receiving more 'likes' and comments that would be considered to have positive valence (i.e. compliments) on objectified self-images, compared to non-objectified self-images, may act as a form of positive reinforcement for that behaviour. Support for this comes from Mascheroni, Vincent and Jimenez (2015) and Chua and Chang (2016), who found that desire for 'likes' was a strong motivator for posting objectified content on social media among European and Singaporean girls retrospectively. This concept would also be consistent with self-presentation theory, since receiving more likes on a particular type of self-presentation would be indicative of having 'pleased the audience' by creating an idealised image, which would therefore encourage further similar depictions of oneself in the future.

One way of seeking validation from the audience might involve using functions like nametags and hashtags to distribute certain images more widely, thus allowing for more people to view them. Explicitly, the use of nametags directly links a person/people with an image – a method of having more certainty that those people will see it. Hashtags serve a similar function, in that these allow for an image to be distributed to a shared page or group relating to that hashtag (e.g. #thinspiration) – consequently making the image visible to the millions of Instagram users that might visit that page. Some research has investigated factors that can be associated with individuals using more 'like-seeking' behaviour, for example Dumas et al. (2017) found that young people higher in narcissism engaged in more use of nametags and

hashtags. However, research has yet to investigate whether there is a difference in the type of images that young people choose to share more widely, e.g. whether more nametags and hashtags are attached to images in which the individual's appearance is considered idealised or objectified. What's more, there is a lack of understanding surrounding audience reaction to these image-types for Instagram users who are more vulnerable to body image concerns, and how this might relate to their production of such images.

Given that SO is consistent with valuing one's appearance over competence, a consideration of the concept and how it applies to those for whom both physical competence and appearance are highly valued, such as those who compete in aesthetic sports like dancing, would be an important expansion of the research.

2.7. Body Image Concerns and the Risk of Eating Disorders in Dancers

Those who partake in aesthetic sports, or sports emphasising the body's physical appearance, e.g. gymnastics, cheerleading, dance, swimming, aerobics etc., report a drive for thinness (Davison, Earnest, & Birch, 2008), increased SO, body surveillance (Tiggemann & Slater, 2001), body shame/dissatisfaction (Kong & Harris, 2015; Moxon, 2016; Parsons & Betz, 2001) and are at greater risk of disordered eating behaviours (Kong & Harris, 2015; Krentz & Warschburger, 2011; Tan, Bloodworth, McNamee, & Hewitt, 2014). Notably, two earlier meta-analyses substantiate evidence for the latter. Hausenblas and Carron (1999) found small to medium effect sizes for anorexic symptoms and drive for thinness in female athletes from aesthetic sports. Likewise, Smolak, Murnen and Ruble (2000) identified that those who take part in dance and performance sports at the elite level were at the highest risk of eating disorders. Individuals involved in aesthetically-focussed sports have been found to

place more value and emphasis on appearance than they do physical competence and function (Abbott & Barber, 2011). Additionally, participation in aesthetic sports is associated with monitoring and investing in the body's appearance more than its physicality, as well as feelings of shame and guilt when an appearance ideal is not achieved (Parsons & Betz, 2001). Therefore, it can be deduced that those involved in these sports can be hyper-vigilant to how others perceive them, and the need to adhere to body ideals is likely to be amplified.

There is a well-established literature linking dancers, body image and disordered eating attitudes. Much of this has treated dancers as a homogenous group (Goodwin, Arcelus, Geach, & Meyer, 2014; Nordin-Bates, Walker, & Redding, 2011; Robbeson, Kruger, & Wright, 2015; Tosi, Dodson, Maslyanskaya, & Coupey, 2018) and has neglected to compare dance forms that differ in the importance placed on body shape, especially thinness. Notably, a systematic review of thirty-three studies revealed that the vast majority of the literature was on ballet dancers, considered particularly vulnerable to body image disturbances and eating disorders (Arcelus, Witcomb, & Mitchell, 2014). Body image concerns in ballet dancers are related to the requirement to retain excessively slender physiques for performance purposes (Anshel, 2004; Nerini, 2015; Swami & Harris, 2012). Carter (2001) established how traditional concepts of femininity endorsed by the media have been used to construct acceptable forms of the 'ballet body', which reinforce the pressure for ballet dancers to achieve greater 'perfection' than the average person. The 'ballet aesthetic' calls for ballet dancers to have an 'anorexic look', i.e. very toned while also clinically underweight. This look tends to be absorbed and sought-after within the ballet culture from a very young age (Heiland, Murray, & Edley, 2008). The demands of specific sport disciplines have been suggested as important to consider when evaluating factors

that may trigger body image concerns and disordered eating (Sundgot-Borgen & Torstveit, 2010), demands of which can differ across different dance communities.

Some other dance types promote more positive body image. Swami and Tovée (2009) found that street dancers were higher in body-appreciation than non-dancers. Street dance refers to dance styles that have typically evolved outside of formal settings, e.g. break dance, locking and popping. Most street dance relate to the hip-hop scene and tend to be improvisational and social in nature. A specific body type is also not typically mandated or projected within its culture. Other research has found that belly dancers and pole-fitness dancers were higher in positive body image than non-dancers – both of which offer more flexibility surrounding the necessity of a certain body type (Pellizzer, Tiggemann, & Clark, 2016; Tiggemann, Coutts, & Clark, 2014). Similarly, Langdon and Petracca (2010) found that contemporary dancers had higher body appreciation, lower drive for thinness and lower trait SO than non-dancers. This latter finding is particularly interesting given that contemporary dance draws from classical ballet. However, an incorporation of elements of modern and jazz dance, a looser focus on specific dance techniques or aesthetic appearance, and a dance philosophy more focussed on the mind-body connection and self-expression is what differentiates contemporary dance from ballet (Goldstein, 2003).

Wyon (2016) documented further differences between the two dance genres in relation to their body type and shape. He stated that contemporary dancers tend to be stronger than their classical counterparts, mainly due to their multidisciplinary backgrounds and diversity of choreography they are exposed to. Additionally, he noted that ballet dancers are generally meso-ectomorphs (tall and muscular, with very little fat) whilst contemporary dancers tend to be mesomorphs (muscular and well-built). In contrast to ballet, contemporary dance does not affiliate with, nor promote the thin-

ideal and is generally a dance form that is open to a range of body types. Therefore, it would be reasonable to hypothesise that young contemporary dancers may not be as vulnerable to socio-cultural pressures for attaining or projecting the 'ideal' body shape.

2.8. Online Self-Presentation in Young Dancers

Some research has examined self-presentation on Instagram by those who competed in aesthetically-focussed sports. Geurin-Eagleman and Burch (2015) adopted a content analysis of eight Olympic athletes' visual self-presentation on Instagram and applied Goffman's (1959) framework. Interestingly, most photos posted by athletes were personal in nature, thus reflecting backstage performance according to the theory. However, they also found that although the number of sexually suggestive images shared was relatively low, these were by far the most popular photos athletes posted of themselves in relation to the number of likes and comments they received. Similarly, despite 'business life' photos being ranked a distant second in overall photos posted, the four most successful athletes studied in terms of follower engagement received more likes on photos of their business life, indicating fans favoured photos of these athletes partaking in their chosen sports – photos that would align with frontstage performances.

Other research undertaken by Lupinetti (2015) undertook a qualitative examination on the use of Instagram by eight amateur female figure competitors; a sport which blends aspects of bodybuilding and fitness. They found that although they strayed from traditional social prescriptions of femininity and beauty, they adhered to those found in the bodybuilding culture, i.e. they exhibited their muscularity as a testament to femininity and beauty. Whilst these findings somewhat deviated from traditional sociocultural body ideals, the research evidenced support for Goffman's

(1959) self-presentation theory. This is because participants' performances on social media were expressions of what they wanted to exude as members of the fitness community, so these acts were constructed to present their best qualities. In addition, construction of these ideals involved editing photos and posing in those that were posted. These findings echo how performances differ according to an individual's role - which in this case corresponded to the specific sport the participants competed in. In other words, a young dancer's role may encourage more depictions of sociocultural body ideals when in 'front stage', given that the mixture of both age group and sport-type enhances their vulnerability to societal pressures in this area. Furthermore, it would be hypothesised that ballet dancers would demonstrate more of these depictions than contemporary dancers, given that the ballet body image parallels and often accentuates appearance-ideals projected by society, particularly for females.

Objectification theory would predict that aesthetic sports would be associated with increased levels of SO than sports where functionality is the primary focus. Research has linked those in aesthetic sports (e.g. bodybuilding) with higher levels of trait SO (Hallsworth, Wade, & Tiggemann, 2005). More importantly, Tiggemann and Slater (2001) found that former ballet dancers were higher in trait SO than non-dancers. As differences have been recognised between dance-types and body image, it may be reasonable to expect differences in SO, which might manifest as different self-presentational strategies on image-based social media. However currently, research investigating young dancers from different communities, whether they differ in body image concerns and SO and moreover, how this might present on social media remains unexplored.

2.9. Study Rationale and Research Questions

Research has started to consider the link between image-based social media and body image disturbances in young people, but this relationship has not yet been explored in dance communities. Research into specific manifestations of body image concerns, i.e. self-presentation, for young people on social media is limited and an inclusion of males has been overlooked. In addition, psychological constructs such as SO are relevant both to dance and the issue more broadly. The present study seeks to extend Goffman's (1959) self-presentation theory and Fredrickson and Roberts' (1997) objectification theory by applying them to the online self-presentation of young dancers on image-based social media. A better understanding of self-presentation, the psychological drivers of this, and the relationship with body image and features of eating disorders in the dance community would address a current gap in the literature. Importantly, it would be of practical value, as it may help young dancers become more aware of their engagement in potentially problematic behaviours and work towards self-acceptance. The assessment of online self-presentation of vulnerable young people may also offer clinicians vital insights into how they are functioning in relation to the body image domains of mental health. The study aims to investigate the following questions:

1. Do ballet dancers demonstrate more frontstage strategies pertaining to sociocultural body image ideals in their self-presentation, i.e. more appearance-ideal and self-objectifying images, than contemporary dancers?

    H1: Ballet dancers will demonstrate more frontstage strategies in their online self-presentation.

2. Do appearance-ideal and self-objectifying images receive more 'likes' and positive comments than images that do not meet this criteria? Does this differ between dance genres?

> *H2: Ballet dancers will receive more positive feedback on appearance-ideal and objectifying content than contemporary dancers.*

3. Are features of self-presentation associated with participant scores on measures of Instagram usage, body surveillance, self-objectification, eating disorder psychopathology and mood in this sample of dancers?

> *H3: Features of self-presentation will be associated with measures of Instagram use and psychopathology in this sample of dancers.*

3. METHOD

There were two parts to the research. The first involved undertaking a content analysis of participants' Instagram images and the second was an online survey that they were asked to complete. Participants were asked to take part in both parts of the study to be included in the research. The study was approved by the School of Medicine Research Ethics Committee at the University of Leeds on 15.05.18 (Ref: MREC17-048). Confirmation of ethical approval can be seen in Appendix A.

3.1. Participants

The study was open to male and female ballet and contemporary dance students aged between 14 and 25. Informed consent was gained from all participants at the start of part one of the research. A negative consent process was also employed for the parents of those children under the age of 16. A letter was sent to these parents (Appendix B) documenting detailed information about the study and providing an opt-out agreement with the researcher's contact details if they did not want their child to take part. Parents were asked to consider the request and to contact the researcher with any queries within the week prior to their child being offered opportunity to take part. Further steps were also taken to safeguard participants, such as signposting to relevant sources of support should they have needed access to this, which was detailed prior to consenting to taking part in the research and at the end of the survey. Participants were also informed that their participation was completely confidential and they could withdraw from the research at any point before their data was anonymised.

Convenience sampling was adopted, whereby dancers were recruited from the Northern School of Contemporary Dance (NSCD), Northern Ballet (NB) and other dance schools across Yorkshire and the North West of England. Schools that offered

taught classes in ballet or contemporary dance were approached to take part in the study and details about the project were sent via email to dance schools in these regions. Ten of these expressed an interest in the project and communications were maintained with these schools via phone and email to assist with disseminating information about the study to parents and students. No parents chose to withdraw their child from participating and only those students who responded to both online links were included in the research. A charity donation of £1 was given to the Northern School of Contemporary Dance hardship fund and the Academy of Northern Ballet bursary fund for each completed survey. Allocation of this donation was determined by the primary dance genre of the participant.

The following participant inclusion criteria were applied:

- Between the ages of 14 and 25 (inclusive)

- Currently a ballet or contemporary dance student

- A current Instagram user

Exclusion criteria were:

- Insufficient understanding of the English language to independently complete the study questionnaire

3.2. Procedure

In the first part of the research, participants were asked to access an online link where they were provided with detailed information about the study and were asked to give their consent for participating. They were also asked to provide their name and Instagram username to enable the researcher to search for them on Instagram. Once

participants had consented and provided this information, a 'follow' request was sent to them using a research account that was created for this purpose with the username 'researchersm'. The researcher used screen-capture software to obtain duplicates of the most recent five images (along with their associated likes, captions and comments) that had been posted by each participant. Only images that contained the participant were obtained and analysed, which involved verifying their identity by viewing profile pictures and/or detailed descriptions of their physical appearance provided in the first part of the study. Accounts were unfollowed once relevant data had been collected and the information was stored on a confidential, password protected database that was accessible only by the research team.

In the second part of the research, participants completed a brief survey via another online link. Where necessary, a prompt was sent to the participant's Instagram account asking them to complete the second part in order to be included in the research. Participants were asked to document their name in both parts of the research to enable survey responses to be matched to Instagram content. Names were removed and replaced with a unique ID once data from both parts had been combined in the final database. Once analysis was complete and written up, all images and comments were permanently deleted. The structure of part one and two of the research can be seen in Appendices C and D.

3.3. Measures

The survey in the second part of the research comprised several measures. In addition to information regarding age, gender, ethnicity and dance training, the following assessments were included in the survey:

3.3.1. *Instagram Usage*

Two questions measuring frequency and duration of social media use were derived from Fardouly et al. (2015). These were modified to ask about Instagram rather than Facebook. The first item, "On a typical day, how often do you check Instagram" is measured using a seven-point rating scale *(1 = Not at all, 2 = Once a day, 3 = Every few hours, 4 = Every hour, 5 = Every 30 minutes, 6 = Every 10 minutes, 7 = Every 2 minutes)*. The second item, "Overall, how long do you spend on Instagram on a typical day?" is measured using a nine-point rating scale *(1 = 5 minutes or less, 2 = 15 minutes, 3 = 30 minutes, 4 = 1 hour, 5 = 2 hours, 6 = 4 hours, 7 = 6 hours, 8 = 8 hours, 9 = 10 hours or more)*. For this study, scores for both questions were analysed separately to measure frequency and duration of Instagram use.

3.3.2. *Body Surveillance Scale (BSS)*

The Objectified Body Conscious Scale - OBCS (Mckinley & Hyde, 1996) is a 24-item measure comprising three 8-item subscales, one of which is the 8-item Body Surveillance Scale which has been used in this research. Body surveillance refers to the habitual monitoring of one's body from an observer's perspective and compared against the internalised cultural ideal. The scale has items such as, "I often worry about whether the clothes I am wearing make me feel good". Participants report their agreement with items on a 7-point scale from 1 (*strongly disagree*) to 7 (*strongly agree*). Appropriate items are reverse coded and final scores are calculated for participants by adding the item responses and dividing by the number of non-missing items. Higher scores are indicative of more body monitoring, which would be consistent with someone who is more concerned with how their body looks than how it feels. The scale has demonstrated good internal consistency as Cronbach alphas for

original and abbreviated versions of the OBCS subscales all exceeded .70. Furthermore, the body surveillance scale of the OBCS has also evidenced good convergent validity with the body shame subscale of the OBCS, the Body Esteem Scale (BES) and the Internalisation General subscale of the Sociocultural Attitudes Towards Appearance Questionnaire - SATAQ-3 (Moradi & Varnes, 2017).

3.3.3. *Self-Objectification Questionnaire (SOQ)*

The SOQ (Noll & Fredrickson, 1998) is a ten-item rank order measure used to assess the extent to which individuals perceive their bodies in observable, appearance-based (objectified) terms versus non-observable, competence-based (non-objectified) terms. Respondents rank a list of body attributes in ascending order of how important each is to their physical self-concept, from that which has the most impact (*rank = 9*) to least impact (*rank = 0*). There are five appearance-based items (weight, sex-appeal, physical attractiveness, firm/sculpted muscles and body measurements) and five competence-based items (physical coordination, health, strength, energy level and physical fitness level). Scores are calculated by subtracting the sum of competence-based items from the sum of appearance-based items (range = -25 – 25). High scores reflect a greater emphasis on the importance of appearance-based physical attributes over competency-based attributes; interpreted as high levels of trait SO.

In a study by Calogero and Jost (2011), a strong negative correlation was demonstrated between appearance and competence rankings, indicating good reliability; r= -.88. A similar study by Hill and Fischer (2008) also found good reliability; r= -.81. Furthermore, earlier evidence from Noll (1996) found the measure to have satisfactory construct validity and correlated positively with the Appearance Anxiety Questionnaire, r=.52, p< .01 (Dion, Dion, & Keelan, 1990); and the Body

Image Assessment, r=.46, p< .01 (Williamson, Davis, Bennett, Goreczny, & Gleaves, 1989).

3.3.4. *Eating Disorder Examination Questionnaire – Short Form (EDE-QS)*

The EDE-QS (Gideon et al., 2016) is a reliable and valid 12-item questionnaire that measures eating disorder psychopathology. It is a brief version of the 28-item version of the EDE-Q. The 12-item scale has items such as, "Have you been deliberately trying to limit the amount of food eat to influence your weight or shape (whether or not you have succeeded)". Each item has a four-point rating scale referring to the past week only (i.e. 0 = *0 days*, 1 = *1-2 days*, 2 = *3-5 days* and 3 = *6-7 days*). Scores are calculated by calculating the mean item score (range = 0 – 3), with higher scores indicating increased symptom severity. The authors note that the measure demonstrated high internal consistency (Cronbach *a* = .91), high test-retest reliability/temporal stability and good convergent validity with the original longer version EDE-Q (r= .91 for people without eating disorders; r= .82 for people with eating disorders) and other measures of eating disorder psychopathology. It has also shown sufficient sensitivity to distinguishing between those with and without eating disorders.

3.3.5. *Patient Health Questionnaire- Short Form (PHQ-2)*

The PHQ2 (Kroenke, Spitzer, & Williams, 2003) is a two-item questionnaire that enquires about frequency of depressed mood and anhedonia over the past two weeks. It is a brief version of the nine-item version (PHQ-9). Items are measured on a four-point rating scale (0 = *Not at all* 1 = *Several days*, 2 = *More than half the days* and 3 = *Nearly every day*). Scores on both items are summed to gain a final score.

Recent meta analytic research into the usefulness of the PHQ-2 for identifying depression suggests that a cut-off point of ≥2 would be preferable when detecting depression in clinical populations. However, in non-clinical populations, a clinical cut score of ≥3 was found to be optimal given the modest specificity value (.70) at the lower cut-off score. Hence, an unacceptably high false-positive rate could result if the lower cut score is used in situations where the prevalence of depression is low (Manea et al., 2016). Therefore, a clinical cut score of ≥3 was utilised for this research. Evidence has established good internal consistency (Cronbach *a* = .83) and good construct / criterion validity (Lowe, Kroenke, & Kerstin, 2005).

3.4. Data Analysis

For the first part of the study involving the Instagram data, content analysis was the primary method of data analysis. This study endeavoured to meet specifications of a quantitative content analysis which included: adopting an a priori design, having acceptable levels reliability and validity, permitting a degree of generalisability of the results, allowing for replicability of the study and offering an opportunity to test hypotheses that were derived from past theory and research. Accordingly, the development of the codebook was informed by existing research to assist with validity of the study and a second person coded a proportion of the data to help establish levels of inter-rater-reliability, thus demonstrating an adherence to these standards.

3.4.1. *Coding of Instagram Posts*

The development of a codebook is requisite for undertaking a content analysis, which essentially replicates a set of guidelines for analysing and interpreting the data.

For this study, ideas for a coding protocol were derived and developed from previous content analytic research on visual media that has been undertaken in similar areas to this research, i.e. studies focussing on the visual self-presentation of young people, men, women and athletes across traditional and social media (Bell et al., 2018; Deighton-Smith & Bell, 2018; Döring, Reif, & Poeschl, 2016; Geurin-Eagleman & Burch, 2015; Jankowski, Fawkner, Slater, & Tiggemann, 2014; Kapidzic & Herring, 2015; Kapidzic & Martins, 2015; Reichart Smith & Sanderson, 2015; Tiggemann & Zaccardo, 2016).

The codebook generated for this research detailed how to code for the image itself, appearance-ideal images, objectified self-images and the audience reaction to images. Coding was initially performed by the author and then a 10% subsample was coded by the external supervisor of the research. Cohen's Kappa showed good inter-rater reliability between the two coders ($K = .79 - 1$). Any disagreements were resolved through discussion and further refinement of the coding framework. Below is an outline of each coding category and its respective definition. A copy of the codebook can be seen in Appendix E.

3.4.1.1. *Image type.* This category reflected details of the image itself and the following aspects were coded as (1 = Yes, 0 = No and 99 = Undeterminable – where applicable): selfie, solo image, group image, related to dance community, in active dance pose, head and shoulder shot, half body, full body and nature of caption is self-objectifying or appearance-related. The number of nametags and hashtags affiliated with the post were also recorded.

3.4.1.2. *Appearance-ideal (AI) images.* This category focussed on whether the content of the image reflected cultural norms in relation to body shape and facial beauty. Body fat was coded using the Contour Drawing Figure Rating Scale (CDFRS) (Thompson & Gray, 1995), which measures perceived body size and was originally developed for use with young adults. The scale depicts nine male and female front-view contour drawings of precisely graduated sizes (Appendix E) and has been shown to have good test-retest reliability (0.78) and construct validity when correlated with self-reported body mass index (0.59) and reported weight (0.78) (Thompson & Gray, 1995). Similar psychometric properties have also been demonstrated for use of the CDFRS with early adolescent girls (Wertheim, Paxton, & Tilgner, 2004). Female participants were considered to meet body fat ideals if they were rated as 3 or below using the CDFRS. Male participants met body fat ideals if they were rated between 3 and 5 on the scale, as this felt to align with societal expectations for men to have low body fat but not to the same degree as females.

Muscularity was coded as (0 = Little to none, 1 = Visible, 2 = High level, 99 = Undeterminable), a framework consistent with other research (Tiggemann & Zaccardo, 2016). Muscularity-ideals were met for females if they were rated either little to none or visible; whereas males met this ideal if they received a rating of visible or high level. Images for both males and females were then coded as (1 = Yes, 0 = No and 99 = Undeterminable) for whether they met facial beauty norms (i.e. facial symmetry, blemish-free skin with no obvious spots or discolouration, neat shiny hair/full head of hair or shaved for men - not bald, straight and white teeth). Ideas for defining these norms were again drawn from similar studies (Boepple et al., 2016; Boepple & Thompson, 2016; Jankowski et al., 2014). To conceptualise this category as an overall variable, participants were coded to meet cultured appearance-ideals if

they met body fat ideals and at least one other element of idealised appearance within this domain.

3.4.1.3. *Objectified self-images.* Images were coded across four different facets of objectification derived from existing content analytic research (Bell et al., 2018; Tiggemann & Zaccardo, 2016). The Images were coded as objectified if one or more feature of objectification was present (1 = Present, 0 = Absent). Firstly, the visibility of the person's face was coded, as images where the face is absent or obscured is said to denigrate an individual's personhood (Deighton-Smith & Bell, 2018). Secondly, objectification was considered present for images that focussed on body parts as opposed to faces (Fredrickson & Roberts, 1997). Thirdly, four body parts (arms, cleavage, abdomen and legs) were coded according to whether the skin was exposed or not and images were considered objectified if they contained three or more exposed body parts. This level of exposure amounts to 75% of the body and would correspond with the notion that objectified individuals typically show a high proportion of skin (Fredrickson & Roberts, 1997). Lastly, objectification was present if images were coded as sexually suggestive. Specifically, this included images that contained: an alluring gaze, winking, flirting, posing sexually – e.g. arching back or posing with a phallic prop, sexual teasing, unbuttoned/ripped or partially/fully open clothing, wearing underwear or swimwear, wearing lingerie and/or pouting while tilting head suggestively to the camera. Ideas for defining this category were drawn eclectically from related research (Bell et al., 2018; Ghaznavi & Taylor, 2015; Jankowski et al., 2014; Tiggemann & Zaccardo, 2016).

3.4.1.4. *Audience reaction.* This category reflected feedback given in the form

of 'likes' and comments on each image. The number of likes were extracted and recorded as continuous data. Positive comments were identified as those that focussed specifically on the participant's appearance and were encouraging of such photos, e.g. sexy, beautiful, gorgeous, pretty and stunning. All other comments were recorded as 'neutral'.

3.4.2. *Part Two of Analysis*

In the second part of analysis, data were analysed using Statistic Package for Social Sciences (SPSS) version 22. All variables were tested for normality using histograms and the Kolmogorov-Smirnov test and homogeneity of variance using Levene's test. This was conducted for the whole sample and separately for ballet and contemporary dancers. When parametric assumptions were not met, both parametric and non-parametric analyses were undertaken. As these tests demonstrated similar patterns of results, parametric tests were reported as they are more robust tests of difference/association.

Descriptive statistics were firstly undertaken to gain an overview of participant age, gender, ethnicity, primary dance style, level of experience and information gathered from survey measures on psychological profiles and Instagram usage. When assessing for differences between the image data gathered from both groups of dancers, tests of difference between proportions were undertaken using chi-squared tests. Mixed analyses of variance (ANOVAs) were also employed to test for differences between dance genres and number of nametags/hashtags used and number of likes/positive comments received on image types. Finally, Pearson product-moment correlations and multiple regression analyses were used to assess for relationships

between image data and positive feedback/survey measures. Alpha was set at $p<0.05$ throughout.

4. RESULTS

4.1. Sample Characteristics

In total, there were 71 participants who took part in the research: 47 contemporary dancers (15 males, 32 females), and 24 ballet dancers (2 males, 22 females). Regarding age ranges, contemporary dancers were a mean age of 15.7 (*SD* = 1.17, *Range* = 14 - 18) and ballet dancers were a mean age of 17.5 (*SD* = 3, *Range* = 14 - 25). Most (77.5%) self-identified as White British, with the other 22.5% belonging to other ethnic backgrounds. Ballet and contemporary dancers differed in their average level of experience, with most contemporary dancers (38.3%) having 3-4 years' experience, followed by 27.7% of the group having 1-2 years. In contrast, most ballet dancers (91.7%) had 6+ years of experience. While all participants categorised their main dance form as either of the two, a large proportion of participants (83%) also practiced and performed the other dance genre. This was made up by a higher proportion in the contemporary sample (91.5%) than the ballet sample (66.7%). Of those who did practice and perform the other dance genre, this was also frequent, with 67.8% of the overall sample engaging in this 1-3 times a week. Table 1 summarises sample characteristics of the overall sample.

Table 1. Summary of sample characteristics

	Contemporary (*n* =47)		Ballet (*n* =24)		Overall (*N* =71)	
	n	*M* or %	*n*	*M* or %	*N*	*M* or %
Age	*Range* = 14 - 18	15.7	*Range* = 14-25	17.5	*Range* = 14 - 25	16.3
Gender:						
Male	15	31.9%	2	8.3%	17	23.9%
Female	32	68.1%	22	91.7%	54	76.1%
Ethnicity:						
White British	34	72.3%	21	87.5%	55	77.4%
White other	3	6.4%	3	12.5%	6	8.5%
Black or Asian	3	6.4%	-	-	3	4.2%
Mixed	7	14.9%	-	-	7	9.9%

backgrounds						
Years of experience:						
6+ years	8	17%	22	91.7%	30	42.3%
5-6 years	6	12.8%	2	8.3%	8	11.3%
3-4 years	18	38.3%	-	-	18	25.3%
1-2 years	13	27.7%	-	-	13	18.3%
< 1 year	2	4.3%	-	-	2	2.8%
Practiced and performed other dance genre	43	91.5%	16	66.7%	59	83.1%
Frequency of practicing other genre:						
4-6 x a week	14	32.5%	1	6.2%	15	25.4%
1-3 x a week	27	62.8%	13	81.3%	40	67.8%
Fortnightly or less	2	4.7%	2	12.5%	4	6.8%

4.1.2. *Instagram Use and Psychological Profiles of the Sample*

Background information about Instagram usage and the psychological profiles of both groups of dancers were compared using data collected from the survey. This involved comparing mean scores on measures assessing self-objectification (SOQ), eating disorder symptomology (EDE-QS), body surveillance (BSS), depression (PHQ-2) and Instagram usage. Data relating to frequency of Instagram use (i.e. 'how often do you check Instagram on a typical day?') and duration of its use (i.e. 'how long do you spend on Instagram on a typical day?') were analysed separately.

On average, both ballet and contemporary dancers checked Instagram every few hours (frequency) and estimated spending 30 minutes a day (duration) on the site. Contemporary dancers scored higher on measures of trait SO (M= -5.3) than ballet dancers (M= -7.9), but this difference was marginal and not significant; $t(68)$= -0.69, p=.49. Scores were comparable for both groups across measures of eating disorder symptomology and body surveillance. For the measure of depression, 21% of ballet and 34% of contemporary dancers fell within the clinical range ($\geq$3). However, on

average both groups fell below this cut off (Table 2), indicating that most would not meet the criteria for clinical depression.

Table 2. Summary of scores for Instagram usage and psychological symptoms

	Contemporary M(SD)	Ballet M(SD)	Overall M(SD)
Frequency of Instagram use	3.4 (1)	3.4 (1)	3.4 (1)
Duration of Instagram use	3.9 (1)	3.8 (1)	3.9 (1)
SOQ	-5.3 (15)	-7.9 (12)	-6.2 (14)
EDE-QS	1.4 (0.6)	1.5 (0.6)	1.4 (0.6)
BSS	4.7 (1)	4.8 (1)	3.7 (1)
PHQ-2	1.9 (2)	1.5 (1)	1.8 (2)

4.2. Content Analysis of Instagram Posts

Overall, 63 participants had at least 5 images of themselves on their Instagram profile. 8 participants from the contemporary dance sample had below this threshold, but collectively had 20 images that were included in the analysis. In total, 335 images were collated and content analysed. Frequencies of each coding category within the sample, along with associated significance values relating to the difference between contemporary and ballet dancers, are summarised in Table 3.

Table 3. Frequency and percentage of each Instagram coding category within the sample, along with significance values

	Contemporary (n = 215)		Ballet (n =120)		Overall (N =335)		
	n	%	n	%	N	%	p (x^2)
Image type:							
Selfie	126	58.6%	44	36.7%	170	50.7%	<.001
Solo image	124	57.7%	61	50.8%	185	55.2%	.22
Group image	91	42.3%	59	49.2%	150	44.8%	.22
Related to dance community	15	7%	25	20.8%	40	11.9%	<.001
In active dance pose	10	4.7%	22	18.3%	32	9.6%	<.001

Caption is related to appearance or SO	15	7%	12	10%	27	8.1%	.33
Head and shoulder shot	81	37.7%	28	23.7%	109	32.7%	.009
Half body	37	17.2%	28	23.7%	65	19.6%	.18
Full body	97	45.1%	62	52.6%	159	47.7%	.28
Appearance ideal (AI):							
Body fat ideals*	104	48.4%	68	56.7%	172	51.3%	.15
Muscularity ideals**	107	49.8%	70	58.3%	177	52.8%	.14
Facial beauty ideals	162	75.3%	97	80.8%	259	77.3%	.25
Meets cultured appearance ideals***	97	45.1%	62	51.7%	159	47.5%	.25
Objectified self-images:							
Face obscured	44	20.5%	26	21.7%	70	20.9%	.8
Body part main focus	27	12.6%	29	24.2%	56	16.7%	.007
Exposes 3 or more body parts	15	7%	7	5.8%	22	6.6%	.67
Sexually suggestive	46	21.4%	12	10%	58	17.3%	.008
Contains 1 or more element of objectification	95	44.2%	49	40.8%	144	43%	.55
Audience reaction:							
Likes (mean)	-	-	-	-	-	-	-
Positive comments (mean)	-	-	-	-	-	-	-

Note: *Sizes $\leq$ 3 for females and 3-5 for males on CDFRS were considered body fat ideals. **Little to none or visible for females, visible to highly visible for males. *** Participants considered to meet cultured appearance ideals if they met body fat ideals + 1 other element of AI category.

4.2.1. *Image Type*

Prior to analysing data for the first research question, characteristics of the images were compared across dance genres. Contemporary dancers posted more selfies than ballet dancers, with a significant percentage difference of 21.9%; $x^2(1)=14.73$, $p=.0001$. Contemporary dancers were also found to post 14% more head and shoulder shots, $x^2(1)=6.84$, $p=.009$.

In contrast, ballet dancers were found to post more images that related to their dance community and featured them in an active dance pose than their contemporary dance counterparts, with percentage differences of 13.8% ($x^2(1)=10.96$, $p=.0009$) and 13.6% ($x^2(1)=16.41$, $p=.0001$) respectively.

4.2.2. *Appearance-Ideal (AI) Posts*

Data in Table 3 indicate that ballet dancers were somewhat higher sharers of posts that met body fat, muscularity and facial beauty ideals than contemporary dancers, but the difference failed to reach statistical significance. Similarly, ballet dancers shared more posts that on the whole met cultured appearance-ideals, but this difference was not significant.

4.2.3. *Objectified Self-Images*

Ballet dancers posted more images in which a body part, as opposed to their face, was the main focus; with a percentage difference of 11.6%; $x^2(1)=7.41$, $p=.007$. For ballet dancers, the most common body part to focus on was legs (44.8%), followed by whole body (41.4%), feet (10.3%) and arms (3.4%). Contemporary dancers focussed primarily on their whole body (63%), followed by legs (22.2%), abdomen (7.4%), cleavage / chest (3.7%) and other (3.7%).

Contemporary dancers posted more sexually suggestive images than ballet dancers; $x^2(1)=6.97$, $p=.008$. Percentages for posting images in which the face was deliberately obscured and where three or more body parts were exposed were similar across both dance genres. Overall, contemporary dancers posted slightly more objectified self-images than ballet dancers, but this difference was not significant.

4.2.3.1. *Use of nametags and hashtags.* This part of the analysis aimed to assess the number of nametags and hashtags attached to AI images and objectified images and whether this differed to the number attached to non-AI/non-objectified images. This was looked at for the sample as a whole and compared across ballet and contemporary dancers. To do this, nametags and hashtags were summed then averaged

for each image type. There was a significant main effect of image type ($F(1, 69)=7.58$, $p=.01$), where more nametags/hashtags were applied to AI than non-AI images. There was a further significant interaction between AI images and participant dance genre ($F(1, 69)=5.74$, $p=.02$), whereby ballet dancers used more nametags/hashtags on AI images than contemporary dancers.

There was also a significant main effect of image type in relation to objectification ($F(1, 69)=5.75$, $p=.02$), showing that more nametags/hashtags were applied to objectified than non-objectified images. Again, a significant interaction was established between objectified images and dance genre ($F(1, 69)=7.49$, $p=.01$), whereby ballet dancers applied more of these to objectified images than contemporary dancers. Table 4 summarises means for nametags and hashtags applied to all image types.

Table 4. Average number of hashtags/nametags (collectively) applied to AI, non-AI, objectifying and non-objectifying images

	Contemporary	Ballet	Overall
	$M(SD)$	$M(SD)$	$M(SD)$
AI images	1.0 (3.0)	9.4 (19.5)	3.9 (12.1)
Non-AI images	0.6 (2.2)	2.6 (7.4)	1.3 (4.7)
Obj. images	0.6 (1.5)	9.2 (19.9)	3.5 (12.2)
Non-obj. images	1.0 (2.4)	2.8 (6.0)	1.6 (4.0)

4.2.4. *Audience Reaction*

In-line with research question 2, data derived from this category sought to assess whether there was a difference in the frequency of positive feedback (in the form of likes and comments) given on AI and objectified images compared to non-AI/non-objectified images. To do this, likes and positive comments were averaged for

all types of images (Table 5). This was looked at for the sample as a whole and compared across ballet and contemporary dancers. No significant main effects were found. For positive comments, there was a significant interaction between AI image type and the dance genre of the participant ($F(1, 69)=4.93$, $p=.03$). Ballet dancers received the highest mean number of positive comments on AI images and the fewest on non-AI images. Contemporary dancers had an intermediate mean number of positive comments for both AI and non-AI images. No other significant interactions were found.

Table 5. Average number of likes and positive comments given to AI, objectifying, non-AI and non-objectifying images

	Contemporary	Ballet	Overall
	$M(SD)$	$M(SD)$	$M(SD)$
Likes:			
AI images	329.7 (365.6)	394.4 (478.8)	351.5 (405.1)
Non-AI images	282.2 (215.5)	215.8 (193.9)	259.8 (209.4)
Obj. images	259.4 (252.5)	331.0 (432.9)	283.6 (323.5)
Non-obj. images	352.4 (373.1)	279.3 (174.5)	327.7 (320.4)
Positive comments:			
AI images	5.26 (9.44)	9.08 (13.69)	6.55 (11.11)
Non-AI images	6.45 (8.50)	2.79 (5.43)	5.21 (7.76)
Obj. images	6.23 (8.41)	7.29 (6.23)	6.59 (9.54)
Non-obj. images	5.47 (7.58)	4.58 (5.65)	5.17 (6.96)

Further analysis of these data sought to assess for relationships between positive feedback on AI and objectified images and the proportion of such images posted. Firstly, correlational analyses were undertaken between the variables of interest. Findings show that significant relationships existed between the proportion of objectified images posted and number of likes ($r=.71$, $p<.001$) and positive

comments (r=.51, p<.001) that they received. A significant relationship was also shown between the proportion of AI images posted and the likes (r=.77, p<.001) and comments (r=.52, p<.001) that they received (Table 6).

Table 6. Correlation matrix of positive feedback on objectified/AI images and proportion of objectified/AI images posted

	AI likes	Obj. likes	AI comments	Obj. comments
Proportion of obj. images	-	.71**	-	.51**
Correlation Sig.		.00		.00
Proportion of AI images	.77**	-	.52**	-
Correlation Sig.	.00		.00	

Note: **p < .01 (two-tailed)

Likes and positive comments given to objectified images correlated highly with one another (r=.55, p<.001), as did likes and comments given to AI images (r=.54, p<.001). This suggested that both measured the same construct and matched an assumption of multicollinearity. Therefore, only one independent variable (likes) was included in the regression analyses. Two multiple regression analyses were performed, with proportion of AI and objectified images posted as the dependent variables in each analysis. Participants' mean positive feedback for AI or objectified images and dance genre were added as predictor variables in each analysis.

For AI images, the results of the regression indicated that the model with mean positive feedback for AI images and dance genre as predictor variables was a significant predictor of proportion of AI images posted (R^2=.49, F(2,68)=32.01, p<.001). The model explained 48.5% of the variance in AI images posted. It was

found that mean positive feedback for AI images significantly predicted the proportion of AI images posted (β=.68, p<.001). This indicates that as mean positive feedback increased by one unit, the proportion of AI images posted increased by 68%. Dance genre was also a significant predictor (β= -.18, p=.04). This indicates that there was an 18% difference in proportion of AI images posted between contemporary and ballets dancers, with ballet dancers posting more.

For objectified images, mean positive feedback for objectified images and dance genre as predictor variables was a significant predictor of proportion of objectified images posted (R^2=.23, $F(2,68)$=10.26, p<.001). The two predictors together explained 23.2% of the variance in the proportion of objectified images posted. The coefficients indicate that as mean positive feedback increased by one unit, the proportion of objectified images posted increased by 48%. The beta value for dance genre indicates that the proportion of objectified images posted was 2% higher for contemporary dancers than ballet dancers. Tables 7 and 8 summarise these findings.

Table 7. Summary of findings from regression analysis for positive feedback and dance genre predicting frequency of posting AI images

	B	$SE\ B$	p
Model 1			
Constant	1.43	0.29	
Likes on AI images	0.01	0.00	<.001
Dance genre	-0.63	-0.18	.04
Note: R^2=.49			

Table 8. Summary of findings from regression analysis for positive feedback and dance genre

	B	$SE\ B$	p
Model 2			

Constant	1.16	0.32	
Likes on obj. images	0.01	0.00	<.001
Dance genre	0.07	0.02	.83

Note: R^2=.23

4.3. Relationship between Instagram Use and Psychological Measures

In accordance with my third research question, this section of the analysis aimed to assess for relationships between features of self-presentation/Instagram use and participant scores on psychological measures. Namely, correlational analyses were undertaken between the proportion of AI and objectified images that participants posted and information gathered from the survey measures of self-objectification (SOQ), eating disorder psychopathology (EDE-QS), body surveillance (BSS), depression (PHQ-2) and Instagram usage. Data for the overall sample showed no significant relationships between proportion of image types posted and any of the survey measures (Table 9). Further analysis assessed for relationships between questions relating to Instagram usage and psychological measures, however no significant relationships were found. Considering these findings, regression analyses were not pursued.

Table 9. Correlational associations between the proportion of AI/objectifying images posted and survey data

	Freq. of usage	Duration of usage	SOQ	PHQ-2	EDE-QS	BSS
Overall AI images						
Correlation	1.10	-.03	-.04	-.02	-.04	.03
Sig	.41	.82	.77	.84	.72	.78
Overall obj. images						
Correlation	-.20	-.04	.02	-.02	.03	-.11
Sig	.10	.82	.88	.89	.79	.34

5. DISCUSSION

5.1. Key Findings

This research aimed to understand how young ballet and contemporary dancers present themselves on Instagram. Specifically, how much young dancers conformed to sociocultural pressures to present an idealised and objectified appearance. The results from this study offer several areas of discussion that have implications for young dancers, dance schools and healthcare professionals. A summary of findings, in accordance with research aims, has been provided within this section.

5.1.1. *Body Image Self-Presentation in Young Dancers*

The first research aim was to assess whether ballet dancers used more frontstage strategies pertaining to sociocultural body image ideals in their self-presentation, i.e. more AI and objectifying images, than contemporary dancers. Findings suggest no evidence that ballet dancers posted more of these image-types. In turn, this reflected similarities in frontstage strategies used by both groups of dancers. However, there were significant differences in objectifying behaviour between dance genres. Ballet dancers posted more images that focussed on a body part, whereas contemporary dancers evidenced more sexually suggestive posts. Furthermore, there were differences in characteristics of images shared and in nametags/hashtags applied to AI and objectifying images. These have the potential to impact upon the type of body image that is projected to others. Therefore, they are important to consider when evaluating conformity to idealised appearance by both dance groups on social media.

5.1.2. *Audience Reaction*

Secondly, the research aimed to assess audience reaction (via 'likes' and positive comments) to AI and objectifying content and whether there were differences between dance genres. It was hypothesised that ballet dancers would receive more positive feedback on such content than contemporary dancers. Findings generally did not support this hypothesis as most showed no difference in positive feedback between image-type and dance genre. However, there was an intriguing finding of a significant interaction between AI image-type and dance genre, whereby ballet dancers received the highest mean number of positive comments on AI images and fewest on non-AI images in comparison to contemporary dancers. Supplementary analysis sought to extend findings from previous research (Bell et al., 2018). Namely, regression analyses were employed to investigate whether number of likes was significantly associated with proportion of AI and self-objectifying images posted in a group of young dancers. Findings revealed significant associations between number of likes and frequency of posting these image-types.

5.1.3. *Relationship between Instagram Use and Psychological Measures*

Lastly, the study sought to assess for relationships between features of Instagram use/self-presentation and participants' self-reported eating behaviour, feelings towards their body and mood. In contrast to what was hypothesised, no significant relationships were established. In addition, there was no difference in eating disorder or mood psychopathology between the groups of dancers and neither group demonstrated high levels of body image-related difficulties.

5.2. Self-Presentation of Young Dancers in the Context of the Literature

5.2.1. *Image Type and Self-Presentation*

There were differences in how ballet and contemporary dancers used Instagram for visual self-presentation. Contemporary dancers posted significantly more selfies and head and shoulder shots of themselves. These may interlink as selfies are commonly taken at arms-length, meaning these images tend to focus on the face and feature a low level of body visibility. Much of the research into selfie behaviour has investigated the relationship between body image-related measures and frequency of posting selfies (Cohen et al., 2018; Ridgway & Clayton, 2016). Although this was somewhat outside the focus of this research, it is interesting that contemporary dancers were higher sharers of selfies, yet no differences existed between the groups on measures of body dissatisfaction or eating disorder psychopathology. This is consistent with observing no relationship between frequency of selfies posted to Instagram and body dissatisfaction in research undertaken by Wagner, Aguirre and Sumner (2016).

Ballet dancers posted more images of themselves in active dance poses and that were related in some way to their dance community. This suggests that they tended to use Instagram to showcase more images associated with their dance background. The greater number of dance pose images could also help to explain why ballet dancers were slightly higher sharers of photos that allowed for more body visibility. Goffman's (1959) self-presentation theory provides a framework whereby this can be understood. Lupinetti (2015) found that those who competed in aesthetically-focussed sports demonstrated 'performances' on social media that were dictated by what they wanted to project as members of the fitness community. Analogous to Goffman's (1959) philosophy, these acts were determined by their 'role' within society as female figure

competitors. Therefore, for ballet dancers, their role as members of the dance community seemed to govern how they wished others to see them. Poses that would be performed 'on stage' formed frontstage strategies in their online visual self-presentation. This was observed far less in the self-presentation of contemporary dancers.

One explanation for this might relate to the average level of experience across both samples; ballet dancers were more experienced (6+ years) in their discipline than contemporary dancers (3–4 years). This would be expected, given that ballet dancers usually train from a very young age (Grant, 2012). With more experience, an increase in professional affiliation to one's dance community might be anticipated, which could mean that dance plays a more pivotal part in the identity they wish to uphold and share with others. Research into professional athletes' self-presentation on Instagram highlighted that incorporating aspects of the athlete's chosen sport in the images that they shared was conducive in building a successful 'athlete brand' (i.e. public persona of an individual athlete) and was one way attracting greater 'follower' engagement (Geurin-Eagleman & Burch, 2015). This is also consistent with Arai, Ko and Ross' (2014) model of athlete brand image, which identified athletic performance as one of three key components to building a successful athletic persona. Thus, for young ballet dancers who are generally well experienced, there may be a pull to use Instagram as a professional self-marketing tool to promote their dance persona and abilities. This could help further their dance career.

It is worth noting that while most participants had a mixture of dance pose and non-dance pose images on their Instagram accounts, a small selection of participant accounts from the ballet group contained primarily dance-related imagery. Considering what is known about rinsta/finsta practices amongst youth today when

managing online self-presentation (Kang & Wei, 2019; Wiederhold, 2018), it would be interesting for further research to investigate whether there are any likenesses in self-presentational tactics used by young dancers, i.e. the creation of different accounts to portray personal and professional identities. Nevertheless, the account details they provided would be consistent with the identity they wanted wider audiences (e.g. the researcher) to see. What was clear for the ballet group, is that their roles as dancers informed a large proportion of their frontstage behaviour.

Ballet poses often involve depicting a polished, idealised body image. Ballet dancers have a specific look and there is visual uniformity to adhere to in both dance postures and attire. Contemporary dance is more diverse and comprises a variety of styles and visual identities. This raises the question, are ballet dancers conforming to the role of a dancer in their self-presentation or the body image norms that can exist within the ballet culture? Incidentally, there is evidence to suggest that the tight-fitting clothing, i.e. leotards and tights, associated with the ballet community negatively impacts on dancers' body and self-perceptions (Price & Pettijohn, 2006). This should be given thought to when evaluating the impact of ballet dance imagery on those who post and view it.

Given that body image concerns have been found to exist amongst ballet dancers (Arcelus et al., 2014), it stands to reason that they may be more motivated to seek validation regarding their body image. This may therefore form another reason for a higher production of dance pose imagery. However, measures administered within this study showed no difference in body image-related variables between ballet and contemporary dancers, and neither groups scored highly on these, suggesting these difficulties may not be common to all ballet dancers. The likeness across psychological

measures may also account for similarities between the dance groups in proportion of AI and objectifying self-images that were posted.

5.2.2. *Appearance-Ideal (AI) and Objectifying Self-Presentation*

It was hypothesised that ballet dancers would be more conforming to appearance-related pressures (i.e. facially attractive, thin-ideal for females and lean muscular-ideal for males) than contemporary dancers. This would be reflected in a greater presentation of AI images on Instagram. For males, an idealised appearance would usually incorporate the muscularity standards that men are urged to achieve by society (Dakanalis, Timko, et al., 2015). However, in this study, the average age of male participants was sixteen and the acquisition of adult musculature can continue until the age of eighteen (NHS, 2018). Therefore, a flexible approach was taken to muscularity-ideals when evaluating whether an image met overall appearance-ideals. If males were not excessively thin or overweight, and met either facial beauty or muscularity ideals, these images were considered AI. This may have impacted findings, as the overall variable did not necessarily reflect an adherence to the idealised adult muscular physique. Nonetheless, it did reflect low body fat, valued both within dance cultures (particularly ballet) and wider society. Body image norms encountered by males are also typically less rigid than those met by females (Buote et al., 2011).

Although ballet dancers posted slightly more images in which they met body fat, muscularity, facial beauty and overall appearance-ideals, these differences were not large enough to be significant. Results on body image-related measures also didn't differ, which perhaps supports the lack of difference in conformity to body shape and appearance-ideals in their online self-presentation. The proportions of AI and non-AI imagery were almost equal which, according to Goffman's (1959) theory regarding

cultured appearance-ideals, reflects a combination of frontstage and backstage strategies. This indicates that both groups of dancers use Instagram in a similar way when it comes to portraying an appearance that resembles one that is desirable and welcomed by society.

Perhaps this supports the importance of presenting a self that is not overtly different from the true self (Higgins, 1987). This would also reflect the fine balance between appearing idealised and appearing realistic on social media, which young people have learned to navigate so they do not appear deceptive to those familiar to them offline (Toma et al., 2008). Thus, posting some images that match these ideals and some that do not may be one way of operationalising this balance for both groups of dancers. The number of images that met appearance-ideals in both groups was not by any means trivial and will be compared with similar research later in this section. This implies a level of commitment to these ideals and may, in certain circumstances, place them at risk for developing body image difficulties and disordered eating attitudes (Ghaznavi & Taylor, 2015; Holland & Tiggemann, 2017). Note however that roughly half of sample images for both groups did not meet the criteria for AI, nor did they demonstrate high levels of psychopathology on the body image measures, consequently limiting evidence for deeming either group 'at risk'.

There was no difference between dance genres when comparing the proportion of images meeting the criteria for objectification. Between 40-44% of images in both dance groups were objectified. This indicates a combination of frontstage (objectified) and backstage (non-objectified) strategies relating to sociocultural body image ideals. That said, specific objectifying behaviours did differ significantly between the groups. Contemporary dancers posted more sexually objectified images than ballet dancers. This may relate to the ballet groups' Instagram profiles being much more symbolic of

their dance background. Contemporary dance stresses versatility, creativity and using dance to freely express innermost feelings (Albright, 2010). Therefore, sexualised or intimate self-expression matches this ethos far more than that of the classical ballet tradition, which involves highly formalised moves and gestures (Grant, 2012). Such a level of expressiveness and individualism, particularly involving self-sexualisation, would violate the strict ballet mould. What's more, research into individual differences observed between the dance genres suggests that ballet attracts those who are introverted and shy in demeanour (Bakker, 1991; Taylor, 1997). Contemporary dancers have been found to be less conscientious and more open to experiences (Fink & Woschnjak, 2011), which might further explicate their higher engagement in sexualised self-presentation.

Ballet dancers posted significantly more images that focussed on a body part as opposed to the face, representing another type of objectification (Fredrickson & Roberts, 1997). It is likely that a large proportion of these images consisted of dance poses. They comprised around 18% of sample images and almost always focused on a body part such as legs or an individual's whole body. Dance poses can be aesthetically focussed whilst also demonstrating the functionality of one's body. Therefore, it cannot be concluded that this finding was due to ballet dancers valuing appearance over physical functionality, as has been commented on in aesthetically-focussed sports (Abbott & Barber, 2011; Parsons & Betz, 2001). In fact, it could be the case that posting dance pose images embodies an appreciation of what the body can do over what it looks like.

Body functionality incorporates not just what the body can do but what the body is capable of doing, e.g. internal processes like digesting food and healing from illness, bodily sensations and engagement in self-care routines. Therefore, body

functionality is more consistent with positive body image and *appreciating* what the body can do, rather than simply what it is physically capable of doing. It has been shown that training women with a negative body image to focus on functions that their body performs can lead to improvements in body appreciation and reduced appearance dissatisfaction (Alleva, Martijn, Van Breukelen, Jansen, & Karos, 2015). This approach has also been successful with undergraduate men and middle aged women (Alleva, Martijn, Jansen, & Nederkoorn, 2014). Dancers have ample opportunity to concentrate on physical aptitude and fitness. Therefore, using Instagram to display dance poses may serve to improve body image when the focus of the image sharer is on the flexibility, strength and capabilities of one's own body. This would make sense, given that research has linked dance forms that concentrate more intently on physical function with increased body positivity (Langdon & Petracca, 2010; Pellizzer et al., 2016; Swami & Tovée, 2009; Tiggemann et al., 2014).

However, the aesthetic element of dance poses (particularly those seen in ballet) cannot be ignored given what is known about the importance of this within the ballet culture. Taking and posting these photos serves a similar purpose to a mirror in a dance class. Research has found that use of a mirror can be an instigator of negative body image in ballet dancers (Radell, Adame, Cole, & Blumenkehl, 2011; Radell, Adame, & Cole, 2002; Radell, Cole, & Adame, 2004). Qualitative research has also identified that although mirrors can be a useful tool to facilitate technical growth, this was not always possible as dancers tended to focus on the appearance of individual body parts in their reflection (Radell, Keneman, Adame, & Cole, 2014). It is conceivable therefore, that this consequence is replicated when viewing their own dance poses on Instagram. This could generate a need for positive feedback from online audiences and provoke an increase in self-objectifying attitudes and behaviours.

Nevertheless, dancers in this study showed little evidence of negative body image and self-objectifying attitudes, which is suggestive of an increased focus on body functionality when posting these images.

In comparing findings from this study to those found in similar research, it is possible to gauge a standard by which dancers conform to societal pressures surrounding body image in comparison to that seen more widely. Findings for AI imagery can be compared to those observed on sites that embellish body shape ideals for the general Instagram user, such as #thinspiration and #fitspiration subcultures. For example, with regard to the body fat component, images featuring individuals with low or very low body fat was reassuringly much less frequent than found on #thinspiration and #fitspiration pages (Boepple et al., 2016; Deighton-Smith & Bell, 2018; Talbot et al., 2017). This may well be expected but is reassuring considering the relationships that have been established between viewing this content and negative body image and/or eating disorder psychopathology (Barlow et al., 2018; Fardouly et al., 2018; Fatt et al., 2019; Prichard et al., 2018; Robinson et al., 2017; Sumter et al., 2018; Tiggemann & Zaccardo, 2015).

It is difficult to benchmark these findings against body fat ideal self-presentations of the average young person. This is because there is a gap in the literature. Almost all studies that code body shape focus on hashtag-labelled or other publicly searchable social media, thus missing private or non-profile self-images of the average young person. Similarly, muscularity-ideals are more difficult to compare, given that previous research has tended to only code for whether images were muscular or not. This reflects a lack of focus on gendered muscularity ideals (i.e. little to none for females and visible to highly visible for males). A useful extension of these

findings would be to study AI constructs more broadly in the online presence of young people, both within and outside of dance populations.

There were some differences in objectifying self-presentation to those documented in non-dancers. For instance, there were more objectified self-images in the overall sample than observed in a non-dance sample. Bell et al. (2018) found that one-third of sample images taken from young adults met the criteria for objectification, whereas the proportion for all dancers in the present sample was closer to one-half of collected images (43%). One possible reason for this could relate to the greater use of dance pose imagery as this often concentrated on body parts. Ballet dancers also posted fewer sexually suggestive images than have been found in young adults more generally (Bell et al., 2018).

Contemporary dancers were more comparable to a non-dance sample in their sexually objectified self-presentation. This type of objectification was the most common form of SO for this group and made up just over one fifth of sample images, which is consistent with content analytic research relating to young people (Bell et al., 2018). As most of the sample were female, it is also in line with evidence suggesting young women are particularly preoccupied with looking 'sexy' in their online self-presentation (Chua & Chang, 2016; Manago et al., 2008; Mascheroni et al., 2015; Siibak, 2009). Perhaps then, ballet dancers deviate from 'average' young people in their self-presentation whereas contemporary dancers are more similar. Future studies should consider the use of a control group of non-dancers to further investigate comparisons between the samples.

More nametags and hashtags were found to feature on AI and objectifying images than images that did not meet these criteria. Ballet dancers also used more of these than contemporary dancers. This is important as increasing the number of tags

used to label an image makes it likely to appear in more search results and invite more people to see it, thus allowing for a wider distribution of these image types. Notably, using additional tags is an activity that has been observed when posting #thinspiration content (Ghaznavi & Taylor, 2015). For ballet dancers, reasons behind increased tagging behaviour could include promoting their dance skills and abilities, given that most dance pose images met criteria for AI and objectification. This facilitates an opportunity for greater positive feedback concerning their appearance, which may be positive as research has established a relationship between receiving 'likes' and increased self-esteem (Burrow & Rainone, 2017). However, this can also potentially serve to reinforce the production of AI and objectifying imagery, as delineated in the next section. The use of nametags and hashtags by the ballet group could be considered additional frontstage strategies, as they assist with making images that conform to societal conventions broadly visible. Ultimately, these findings provide a foundation for further research in this area.

5.2.3. *Audience Reaction to AI and Objectifying Self-Presentation*

It was hypothesised that ballet dancers would demonstrate more frontstage strategies in relation to body image ideals and that they would receive more positive audience reaction to such images. Research has demonstrated that 'pleasing the audience' provides motivation for presenting the self in similar ways in the future (Baumeister & Hutton, 1987). Hence, more positive feedback on AI and objectified self-presentation might contribute towards reasons for an increased distribution of these images.

Mostly, results demonstrated no difference in positive feedback between image-type and dance genre. There was an exception of a significant interaction being

observed between AI image type and dance genre. This showed that ballet dancers received the highest mean number of positive comments on AI images and the fewest on non-AI images, with contemporary dancers having an intermediate mean number of positive comments on both image types. This suggests that ballet dancers received more admiration for idealised appearance in the form of comments and shows some support for the notion that having low body fat is endorsed and reinforced within the ballet community (Heiland et al., 2008). That said, this finding was not mirrored for likes on AI images, nor were there any significant findings for audience reaction to objectifying images. This finding, therefore, cannot be generalised across all forms of positive feedback and image-types.

Results from the regression analyses showed that number of likes significantly predicted proportion of AI and self-objectifying images posted. There was an interaction between number of likes and dance genre in determining the number of AI images posted. This showed a difference of 18% in the proportion of AI images posted between contemporary and ballets dancers, with ballet dancers posting more. Dance genre did not significantly contribute to the predictive model for proportion of objectified images posted, indicating this played no role in the frequency of sharing these images. These findings are consistent with previous research which found that positive feedback was associated with frequency of posting objectified self-images (Bell et al., 2018). They support qualitative research which suggests that the desire for receiving more likes is a motivator for posting objectified self-images (Chua & Chang, 2016; Mascheroni et al., 2015). In addition, it is consistent with experimental evidence of the social reinforcing properties of positive feedback on social media (Sherman, Payton, Hernandez, Greenfield, & Dapretto, 2016).

These findings help illustrate the relationships that exist between audience reaction, dance genre and frequency of posting AI and objectified self-images. In this study, audience reaction was conceptualised as a predictor of posting these images. However, all data were gathered at the same time point so causality cannot be assumed. Therefore, qualitative or longitudinal research is necessary to better disentangle and elucidate relationships between audience feedback and posting these image-types.

5.3. Instagram Use and Psychological Profiles of Participants

On average, both ballet and contemporary dancers reported checking Instagram every few hours and estimated spending 30 minutes a day on the site. This is much less than the average length of time reported for a general population of 16 – 24 year olds: 2 hours 26 minutes (Frith, 2017). It suggests that young dancers dedicate less time to Instagram than the average young person. This is encouraging, considering the large body of research that has linked high Instagram use with a range of negative mental health consequences and body image-related difficulties (Ahadzadeh et al., 2017; Bruner, 2018; Cramer & Inkster, 2017; Lup et al., 2015; Sherlock & Wagstaff, 2018).

Participant scores on measures of Instagram use, eating disorder psychopathology (EDE-QS), body surveillance (BSS), depression (PHQ-2) and self-objectification (SOQ) showed little difference between dance genres. Moreover, mean scores across psychological measures indicated that both groups had relatively low levels of psychopathology. This places them at lower risk of developing body-image related difficulties, as documented in research (Dakanalis et al., 2015; Moradi, Dirks, & Matteson, 2005; Muehlenkamp & Saris-Baglama, 2002; Tiggemann & Slater,

2015). It is possible that the low mean age of participants may have impacted findings for the self-report measures. The mean age of participants in the study was sixteen and is considered 'peak' age for the onset of eating difficulties (National Institute for Health and Care Excellence, 2017). Research states that denial is typical in the early stages of eating disorders and so acknowledgement/presentation of these difficulties often arrives later than onset (Fisher, Schneider, Burns, Symons, & Mandel, 2001), which could account for the low self-reported symptomology. Furthermore, the measures used were originally developed for use with adult populations (Gideon et al., 2016; Kroenke et al., 2003; Mckinley & Hyde, 1996; Noll & Fredrickson, 1998) and there may be potential for confusion in younger participants with some complex concepts and question styles, e.g. the ranking style of the SOQ. However, other research has employed these measures with children/teenagers (Richardson et al., 2010; Slater & Tiggemann, 2011; Werthmann et al., 2019). The concepts assessed were also highly relevant to this age range and all school age participants were in full-time education. Therefore, there is some confidence that the participants understood what was being asked of them and could engage with the assessments.

The measure of eating disorder psychopathology used in this study has no normative data for comparison purposes. However, it is possible to use norms from the standard version – the Eating Disorder Examination – Questionnaire (EDE-Q) - as a proxy to compare findings in this study. The measures use the same scale and have shown to be highly correlated for people with and without eating disorders (Gideon et al., 2016). Based on large representative samples of young adolescent and young adult women, both groups of dancers scored just under the average value expected for a similar population, which was approximately 1.6 across the studies (Carter, Stewart, & Fairburn, 2001; Mond, Hay, Rodgers, & Owen, 2006).

Twenty-one percent of ballet and thirty-four percent of contemporary dancers fell within the clinical range of ≥3 on the assessment of depression (Manea et al., 2016). However, on average both groups fell below this cut off, indicating that most would not meet the criteria for clinical depression. This may indicate that generally, young dancers are functioning well in relation to mood. Nonetheless, this short measure is an initial screening check that precedes a more thorough assessment.

Contrary to the final hypothesis, no significant relationships were established between measures of Instagram use/psychopathology and proportion of AI/objectifying self-images posted. Similarly, there were no significant associations between the measures of Instagram use and any of the psychological measures. This contrasts with previous research which has found relationships to exist between Increased social media use or posting of objectifying content and poor mental health/body image (Ahadzadeh et al., 2017; Bell et al., 2018; Bruner, 2018; Cramer & Inkster, 2017; Lup et al., 2015; Sherlock & Wagstaff, 2018). Overall, the results suggest little difference between dance genres in psychological variables, low levels of psychopathology and no relationships with social media use. This is promising evidence as it presents a more optimistic view of body image amongst young ballet dancers than has previously been recorded (Arcelus et al., 2014). It also suggests that engagement in AI and objectifying self-presentations on Instagram does not necessarily reflect negative body image in dance populations.

5.4. Research Strengths and Limitations

There were several strengths of the research. This was the first study to investigate the self-presentation of young dancers on highly visual social media and can provide a basis for which further research can build upon. Findings from this study

can help direct recommendations and further research involving dance populations and have provided insight into the self-presentational behaviour of young people who are particularly vulnerable to body image difficulties. Content analytic studies investigating the image-sharing practices/Instagram use of young people are lacking compared to most research into this behaviour, which heavily relies upon self-report measures (Bij de Vaate et al., 2018; Cohen et al., 2017, 2018; Fox & Rooney, 2015; Lamp et al., 2019). Therefore, employing a content analytic method was less prone to subjectivity and participant bias.

Content analysis methodology can be a useful, unobtrusive means of analysing data and is high in reliability as it follows systematic procedures that can be replicated. Furthermore, it becomes a more powerful tool when combined with other research methods, e.g. surveys (Neuendorf, 2017). The coding protocol developed for this study is a strength that should be capitalised on. This is because a novel approach was developed for conceptualising AI images, which involved an image meeting body fat-ideals plus either facial beauty or muscularity-ideals. This allowed for emphasis to be placed on the body fat element whilst capturing the overall essence of the person's appearance. Sociocultural AI aspects were therefore transformed into one measurable variable; a coding strategy that can be taken forward in future studies. Another strength of the methodology was that the psychological measures used within the survey all demonstrated strong psychometric properties.

Most importantly, this research has perhaps paved the way for a more balanced view into body image-related concerns in the ballet culture. Average scores on body image-related measures highlighted little difference between them and the contemporary dance group, with neither group showing alarming signs of

psychopathology. This calls for a more sanguine disposition when evaluating mental health within the ballet culture.

Notwithstanding the strengths of the research, several limitations to the study should be taken into account. The research was exploratory in nature and the sample size was determined by similar content analytic research and the logistics of the project, e.g. timing and availability of participants. It was difficult to recruit to the ballet sample. The uptake from this group was much slower than the contemporary group. This resulted in fewer dancers comprising the ballet sample. Unequal sample sizes can result in unequal variance between samples, which can lead to a loss in statistical power and a higher chance of Type I errors (Rusticus & Lovato, 2014). It is plausible there was more apprehension to participate in the study from ballet schools and pupils due to the nature of the study. The narrative linking ballet with body image problems has existed for some time and continues to discount the gains that can be associated with partaking in ballet, as seen in news headlines (Shoker, 2013). Importantly though, some reports and publications are starting to reinvent the ballet reputation and divert attention to the physical and mental health benefits it can have for those who take part in it (Menzies, 2019; Paskevska, 2013). Therefore, a drive to reframe ballet as it relates to body image and mental health may have impacted on willingness to participate in this study.

Another sampling issue is there were far more females in both groups than males. This was expected given that dance training is more popular with females (Arcelus et al., 2014). Nonetheless, this affects whether these findings can be generalised to mixed gendered dance samples. As noted earlier, most previous body image/self-presentation research has focussed exclusively on females (Bell et al., 2018; Chua & Chang, 2016; Cohen et al., 2018; Zheng et al., 2019). This may be

useful to bear in mind when evaluating some differences shown in this study, such as the lack of significant relationships between self-presentation behaviour and background psychological measures.

Other demographic information may have also been relevant to these findings, such as differences in the level of dance experience in each group and the proportion of participants also practicing and performing the other dance genre. Most participants were also White British, therefore the westernised body image ideal that this study focussed on may have been more relevant to this sample than a group of young dancers from different cultures or ethnic backgrounds, where more fuller figures can constitute an idealised appearance (Swami, 2013). The focus on participants' five most recent Instagram posts with them present also makes it unclear how representative the dataset is of their typical image-sharing. Ultimately, the issues with sampling may have affected the reliability of data collected and some of the differences highlighted between the groups. Future studies with larger image samples, particularly from ballet dancers, would help increase the reliability of the results highlighted in this study. Furthermore, it may be beneficial to use a more stratified sample of images (i.e. collected at different time points) to determine representativeness.

Finally, there are some methodological limitations that should be noted. As with any content analytic research, development of the coding scheme and the coding itself can introduce researcher bias due to it always involving a level of interpretation (Neuendorf, 2017). In addition, the measures used within the study are subject to self-report bias. Importantly, due to the quantitative nature of this research, it only provides information about 'what' rather than 'why' phenomena may exist. Consequently, conclusions cannot be drawn about meanings and motives behind self-presentation

behaviour and how this relates to body-image related variables. Further qualitative investigation would be required to explore this.

5.5. Practical Implications

Findings from this study suggest young dancers' engagement with image-based social media can be both personally and socially affirming. Image sharing facilitates an expression of one's group identity and offers opportunity to build social capital. For ballet dancers, this particularly enables a sense of belongingness to their dance community. This parallels the benefits of social media use for young people that have been outlined previously (Cramer & Inkster, 2017; Quinn & Oldmeadow, 2013). It suggests that Instagram offers a constructive platform for identity formation in young dancers.

There are some caveats to note. Both dance groups distributed a large proportion of images that aligned with self-objectifying attitudes and body image ideals. Therefore, these findings can also be useful in helping young dancers and their families recognise potentially deleterious practices they are engaging in on social media. By enhancing awareness of 'frontstage' and 'backstage' performances online as they relate to body image, young dancers could be more equipped to evaluate what they choose to post on Instagram and can take a more informed role over the type of body image/identity they are exhibiting to others.

Likewise, findings can help direct dance schools in supporting young dancers in their use of social media. Emerging experimental evidence has found the implementation of a social media literacy programme to be a useful buffer against the effect of social media use on body image-related variables in young women (McLean, Wertheim, Masters, & Paxton, 2017; Tamplin, McLean, & Paxton, 2018). This

intervention helps to address the idealised nature of images and content uploaded to social media and educate young people about the impact comparisons to such content can have on their appearance concerns. Imperatively, literature is starting to highlight how individuals can apply the tenets of media literacy to their online self-presentation (Kimbrough & Guadagno, 2019). Media literacy, done well, has the potential to address some of the difficulties of navigating idealised and realistic self-presentation and to facilitate discussion about 'perfected' appearance in the online world.

The present research could also help tailor the type of support provided. For example, more guidance can be given to young contemporary dancers around engaging in self-sexualising behaviour and the possible repercussions of this. These findings cannot attest to the consequences of engaging in sexualised self-presentation. However, other research has suggested that women and men who are presented in sexually objectified ways on SNSs are judged more negatively than those do not show this type of behaviour (Daniels & Zurbriggen, 2016; Fasoli, Durante, Mari, Zogmaister, & Volpato, 2018). Furthermore, there is research surrounding consequences of viewing such material, such as the development of SO and negative body image for both young men and women (Aubrey, 2006; Vandenbosch & Eggermont, 2012, 2013).

For ballet schools, there could be more emphasis placed on posting body-focussed images and dance poses. Whilst it is important to pay heed to the objectifying/AI element of these image-types, it is equally important to acknowledge the testament they can be to their skills as ballet dancers. Thus, careful thought should be given to how young dancers can shape their online professional identity as a dancer whilst being mindful of the type of body image they are exuding.

Healthcare professionals can also benefit from these findings. They can help counter expectations that those involved in aesthetic sports would show an increase in body image psychopathology and demonstrate more harmful practices on social media than the average young person. This research provides no evidence for ballet dancers being regarded an 'at risk' group for body image-related difficulties in comparison to less aesthetically-focussed dancers and young people in general, which interestingly aligns with some research (Toro, Guerrero, Sentis, Castro, & Puértolas, 2009). Therefore, when ballet dancers come into contact with services in the future, these results can inform a more hopeful initial clinical judgement about this population.

5.6. Directions for Future Research

A more detailed exploration of the importance of body functionality for dancers would be of value and offer a more detailed understanding of body image within this population. Although the measure of SO and body surveillance provide an indication of body functionality, researchers have critiqued these measures for positioning functionality-focussed attitudes and behaviours at the opposite end of the continuum from appearance-focussed attitudes and behaviours, even though there is debate whether these are opposite ends of the same construct (Webb, Wood-Barcalow, & Tylka, 2015).

Other measures, such as the Functionality Assessment Scale (FAS), have been proposed as a more thorough alternative for assessing various aspects of body functionality (Alleva, Tylka, & Kroon Van Diest, 2017). This would be useful to employ in further research with young dancers. Understanding more about body functionality within dance samples could provide an indication of where there is room for growth. This is vital given that cultivating appreciation of body functionality has

the potential to offset appearance concerns (Alleva et al., 2014, 2015). Assessing relationships between scores on this measure and features of self-presentation/Instagram use may also enrich findings in this study.

In the same vein, the development of psychometrically sound assessments of body image-related psychopathology specifically for teen participants is lacking and is an area for future researchers to turn their attention to. The FAS and the measures used within this study have all been developed for use with adults and future studies should consider the creation of similar measurement tools for children and teenagers. This is important as it enhances confidence in the comprehensibility of the questions for younger participants and thus gives more surety in results.

Research into the use of nametags and hashtags is extremely scarce. Going forward, it could be useful to understand more about the nature and type of hashtags that ballet dancers are using on AI and objectified self-images. This could be crucial in finding out more about the types of audience ballet dancers are hoping to attract when posting idealised imagery. Importantly, this could provide more insight into motives behind posting such content. Some research has studied the impact increased hashtags/nametags can have on the number of likes and comments received (Geurin-Eagleman & Burch, 2015). This might be another avenue to explore.

Longitudinal research could help to better understand the presence of a predictive relationship between audience feedback and posting of idealised/objectified content. This is extremely difficult to recruit to and conduct but following a cohort over the course of college studies might be possible. Relatedly, the variables examined accounted for 49% and 23% of the variance in frequency of posting AI and objectified self-images respectively. This means future research should consider the contribution

of other factors (e.g. level of experience, age, gender etc.) in the posting of these image-types.

More research is required to understand the generalisability of these findings. For instance, it would be interesting to investigate how demographic variables, such as age, gender and level of dance experience, might impact on the online self-presentation of dancers from different genres. Future studies could focus on the self-presentation of single gender samples. A focus on male dancers, also young males more generally, would be particularly warranted given the distinct lack of attention to this group. It would be valuable to assess for differences between the self-presentation and psychopathology of dancers in this study and those who are slightly older, e.g. in their mid-twenties. This would be particularly useful given what is known about the common delay between age of onset of eating difficulties and appraisal/presentation of symptoms (Fisher et al., 2001). Furthermore, recruiting a larger sample that varied in experience level would allow for within and between genre comparisons on this demographic. The latter would be of particular interest, as previous research has found the presence of body image concerns to differ depending on how experienced ballet and contemporary dancers were (Swami & Harris, 2012). Future research should also consider focussing on young dancers from black and minority ethnic backgrounds to further understand the cross-cultural applicability of western body image ideals. This may be difficult to recruit to in dance specialties like ballet, given the dominance of White British individuals who partake in it (Ravaldi et al., 2006). Therefore, considering those from other dance forms/aesthetic sports might provide a means of capturing a more ethnically diverse sample.

Finally, this study could underpin qualitative investigation into the self-presentation of young dancers, which could help ascertain greater detail relating to

intentions behind their Instagram use. This might involve interviewing dancers about the importance of body image on Instagram and factors that drive their online self-presentation. It could incorporate questions about the importance of dancer identity online and motivation for posting dance-related imagery. A thematic approach to analysis could then help categorise prevalent themes regarding influencers of their social media use.

5.7. Conclusion

Image-based social media use amongst young people is rising at an unprecedented rate. The literature suggests that there are potentially both advantages and disadvantages associated with social media use amongst this age group. Research has found that use of these sites can be involved in perpetuating body image disturbances in the younger generation. Although a large proportion of the literature has investigated the impact of social media use on its younger users, studies have generally neglected to acknowledge the dynamic component of SNSs, i.e. users are generally active in their engagement and will not only view content but also upload it. Therefore, studying the online self-presentation of young people is crucial in identifying the extent to which they align their self-image with harmful body image ideals.

Research into the social media use of those considered more vulnerable to body image concerns, such as young dancers, has been absent. The present study was the first to investigate image-based social media use by young ballet and contemporary dancers. These findings offer a fresh insight into the mental health of young ballet dancers and infer that this is, in fact, no poorer than that of less aesthetically focussed dance and non-dance populations. Instagram use by young dancers, in terms of

intensity and duration, was also less frequent than has been reported in other young people. Generally, ballet dancers' self-presentation parallels that of contemporary dancers, except for it being more incorporative of their identity as a dancer and less sexually objectifying. Ballet dancers demonstrated similar proportions of idealised and objectifying self-images to contemporary dancers, even though the ballet group were expected to post more given the enhanced focus on aesthetic appearance within the ballet culture. The levels at which both groups conformed to these self-image ideals should still be addressed. These image-types were largely apparent in their self-presentation and have the potential to impact the way in which they are viewed by themselves and others. Nonetheless, these findings mean dance schools and healthcare professionals can be more confident about the body-image domains of mental health in young dancers.

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7. APPENDICES

7.1. Appendix A: Confirmation of Ethical Approval

Faculty of Medicine and Health Research Office
School of Medicine Research Ethics Committee (SoMREC)

Room 9.29, level 9
Worsley Building
Clarendon Way
Leeds, LS2 9NL
United Kingdom

+44 (0) 113 343 1642

15 May 2018

Sarah Morrow
Psychologist in Clinical Training
Leeds Institute of Health Sciences
Faculty of Medicine and Health
Clinical Psychology
Level 10, Worsley Building
University of Leeds
Clarendon Way
LEEDS   LS2 9NL

Dear Sarah

Ref no: **MREC17-048**

Title: **Self-presentation by young ballet and contemporary dancers on image-based social media**

Your research application has been reviewed by the School of Medicine Ethics Committee (SoMREC) and we can confirm that ethics approval is granted based on the following documentation received from you.

Document	Version	Date Submitted
Thesis_Ethical_Review_Form_V3	3.0	31/01/2018
Online survey - part one (Version 2.0)	2.0	26/04/2018
Online survey - part two	1.0	31/01/2018
Letter to parents of under 16s (Version 2.0)	2.0	26/04/2018
Emails to participants (version 2.0)	2.0	26/04/2018
Ethics protocol v2.3 (new)	2.3	31/01/2018

Please notify the committee if you intend to make any amendments to the original research ethics application or documentation. All changes must receive ethics approval prior to implementation. Please contact the Faculty Research Ethics Administrator for further information (fmhuniethics@leeds.ac.uk).

Ethics approval does not infer you have the right of access to any member of staff or student or documents and the premises of the University of Leeds. Nor does it imply any right of access to the premises of any other organisation, including clinical areas. The committee takes no responsibility for you gaining access to staff, students and/or premises prior to, during or following your research activities.

Please note: You are expected to keep a record of all your approved documentation, as well as documents such as sample consent forms, risk assessments and all other documents relating to the study. This should be kept in your study file, which should be readily available for audit purposes. You will be given a two week notice period if your project is to be audited.

It is our policy to remind everyone that it is your responsibility to comply with Health and Safety, Data Protection and any other legal and/or professional guidelines there may be.
We wish you every success with the project.

Yours sincerely

Dr Naomi Quinton, Co-Chair, SoMREC, University of Leeds
(Approval granted by Co-Chair Dr Naomi Quinton on behalf of the committee).

7.2. Appendix B: Letter to Parents of Children Under 16 Years Old

Version no: 3. 19th October 2018

UNIVERSITY OF LEEDS

Research title: Self-presentation by young ballet and contemporary dancers on image-based social media

Dear parent/guardian,

My name is Sarah Morrow and I am a Psychologist in Doctoral Clinical Training studying at the University of Leeds. I am writing to provide information about my thesis research project, which will require participation of young ballet and contemporary dancers. The study is open to students aged between 14 and 25 and is about how young dancers use social media, namely Instagram, for self-presentation. This letter is being sent out to all parents/ guardians of children under the age of 16 so you are fully informed about the research and you can review your child's participation in the study. Your child must be an Instagram user to take part.

Your child should take part in both parts to be included in the research. In the first part, students will be asked to provide their Instagram username to enable me to 'follow' their account. Your child's consent will be confirmed by providing this information and completing this first part. They will receive my Instagram username so that they can accept a 'follow' request. I will screenshot five of their most recent images (and associated comments and captions) in which your child is present and then unfollow their account once all relevant data is obtained. Images and associated content will be stored on a confidential, password protected electronic database and will be permanently deleted once analysed. This content will only be accessible by myself and my research supervisors.

The link for part two will take them to a brief online survey. Students will be asked to provide their name, information regarding their usage of Instagram, and how they feel about themselves. Their names will be removed from the final database. No student will be identifiable in the information stored and it will be kept in a password protected electronic database. The study has been approved by the University of Leeds School of Medicine Research Ethics Committee.

Your child's participation in this study is entirely voluntary and all students are required to give their full consent. Your child also has the right to withdraw from the study any time before submitting the final survey. Your child's data cannot be withdrawn after this point as it will have been anonymised. By taking part in this study they would be helping to support an under-developed but very important area of research relating to social media use by young dancers. However, should your child not wish to participate, or wish to withdraw from the study after they had consented, this will not affect their future study in any way. If you have any concerns, or do not want your child to participate, please contact those named below in the next week. **If I do not hear from you before this date, then I shall assume you are happy for your child to participate in the research.**

Contact details

Principal researcher:
Sarah Morrow – Email: umsam@leeds.ac.uk

Version no: 3. 19th October 2018

UNIVERSITY OF LEEDS

Researcher's supervisors:
Professor Andrew Hill – Email: a.j.hill@leeds.ac.uk, based at the Leeds Institute of Health Science within the University of Leeds.

Dr Gemma Traviss-Turner – Email: g.traviss@leeds.ac.uk, based at the Leeds Institute of Health Science within the University of Leeds.

Yours sincerely,

Sarah Morrow
Principal researcher

7.3. Appendix C: Part One of the Online Survey

Page 1: Information about the Study

This study is about how young dancers use social media such as Instagram. There are two parts to the study. First, I am interested in your most recently posted images of yourself. Second, there will be a short online survey with some questions to complete.

For the first part of the study, I need your Instagram username. I can then 'follow' you on Instagram and you would accept a 'follow' request sent from me. I will screenshot five of your most recent images (and associated comments and captions) in which you are present and then unfollow your account. If I have difficulty identifying you (e.g. in a group photograph or where your face is not visible), I will send a private message to your Instagram account asking for a brief description of your physical appearance to help with this process. When you accept my 'follow' request, I ask that you do not try to 'follow' this account as your request will not be accepted. This is so that confidentiality of others taking part in the study can be maintained (i.e. my list of 'following' cannot be accessed).

Your images and associated content will be stored securely and confidentially on a password protected University server, accessible only by me and my research supervisors. Once analysed, all images, associated content and Instagram details will be permanently deleted.

In the second part of the study, a follow-up email will be sent with another link to a short survey. You will be asked to provide some demographic details and information regarding your usage of Instagram and how you feel about yourself. This should take 10-15 minutes to complete. A separate database will contain your responses to the survey. You should complete both parts of the study to be included in the research.

Taking part in this study is completely voluntary. You will be asked to provide your name in both phases of the study to enable survey responses to be matched to Instagram content. Your name will be removed and replaced with a unique ID on both databases once you have completed the survey. You can stop at any time and can withdraw from the study by contacting the researcher on the email address at the bottom of this page. You can no longer withdraw once you have clicked the 'submit' button at the end of the final survey.

To thank you for taking part in this study, a donation of £1 will be made to the student hardship fund for everyone who completes the study. Further details about this are provided at the end of the survey.

If you would like to know more about the study, please contact the researcher, Sarah Morrow (umsam@leeds.ac.uk), Psychologist in Clinical Training at the University of Leeds. Should taking part in this research raise any concerns that you feel you need support with, we suggest you talk to someone close to you such as a parent, doctor or counsellor. We would also recommend looking at these online services which offer support for young people:

www.youngminds.org.uk
www.themix.org
www.youthaccess.org.uk

Page 2: Confidentiality and Consenting (Agreeing) to Take Part in the Study

Please read the following information before deciding whether or not to take part in the study.

- I have read and understood the "Information about the study" section.

- I know that taking part in the study is my decision and that I can stop at any time without giving a reason.

- I understand that I will not be able to withdraw from the study once I have clicked the "submit" button at the end of the final survey. This is because data gained in the study will be anonymised once completed.

- I understand that if I need any more information about the study then I can contact Sarah Morrow at the University of Leeds on umsam@leeds.ac.uk. Alternatively, I can contact their research supervisors, Professor Andrew Hill (a.j.hill@leeds.ac.uk) or Dr Gemma Traviss-Turner (g.traviss@leeds.ac.uk), based at the Leeds Institute of Health Science within the University of Leeds.

- I understand that my information will be kept confidential and not shared beyond the researcher's supervisors or to any other third party organisations.

I understand that by providing my name and Instagram username on the next page and then clicking CONTINUE, I am agreeing to take part in the study.

Page 3: Your name and Instagram Username

Please provide your name and Instagram username below. You will soon receive a follow request from me. My username is 'researchersm'. You will need to accept my request so that I can have temporary access to your profile. I will unfollow you once I have five of your most-recently posted images of yourself.

Please provide your name:
………………………………………………………………………….

Please provide your Instagram username:
………………………………………………………………………….

Is your profile picture of you alone? Please answer yes or no:
…………………………………………………………………………..

If no, please could you provide a brief description of your physical appearance (e.g. hair colour/ style, skin colour, glasses or clothing in your profile picture) to help me clearly identify you in your pictures?
…………………………………………………………………………..

Page 4: Thank You and Next Steps

Thank you for giving your consent to participate in the study. Please now complete the second part of this study (the brief survey) via the link that you have been sent. Alternatively, please copy and paste the link below into your web browser to access this:

https://leeds.onlinesurveys.ac.uk/sm-thesis-survey-part-two

7.4. Appendix D: Part Two of the Online Survey

Page 1: Introduction to the Survey

Thank you so much for giving me temporary access to your Instagram account.

The second part of my research is a short survey. There will be a number of questions about your use of Instagram and about how you see yourself. It should take 10-15 minutes to complete. You can follow your progress through the bar at the top of each page.

Clicking the CONTINUE button at the bottom of this page will take you to the survey.

Once you have clicked on the CONTINUE button at the bottom of each page, you cannot go back to look at or change any answers.

Page 2: Information about You

1. What is your name and Instagram username? ……………
2. Please enter your age: …………....
3. Are you:
> Male
> Female

4. Are you:
> White British
> White Irish
> Any other White background
> Mixed: White and Black Caribbean
> Mixed: White and Black African
> Mixed: White and Asian
> Any other mixed background
> Asian or Asian British
> Black or Black British
> Other (please specify………..)

5. Which genre of dance do you practice and perform most frequently?
> Ballet dance
> Contemporary dance

6. How many years of experience in this genre of dance do you have?
> 1 – 2 years
> 3 – 4 years
> 5 – 6 years
> 6+ years

Page 3: Social Media Use

The first question is about your overall social media use, followed by a series of questions relating specifically to your use of Instagram.

1. How often do you use social media platforms? Please rate each of the following on a scale of 0 (never) to 5 (everyday):
      a) Instagram
      b) Facebook
      c) Twitter
      d) Snapchat
      e) YouTube
      f) Pinterest
      g) Other (please state platform and rate usage using scale above: …………..)

2. How many followers are on your Instagram account? ………….
3. How many Instagram accounts are you following? ………….
4. What is the availability of your Instagram profile?
      Public
      Private
      Don't Know

5. On a typical day, how often do you check Instagram? Please select one option from the following:
      Not at all
      Once a day
      Every few hours
      Every hour
      Every 30 minutes
      Every 10 minutes
      Every 2 minutes

6. Overall, how long do you spend on Instagram on a typical day? Please choose one option from the following:
      5 minutes or less
      15 minutes
      30 minutes
      1 hour
      2 hours
      4 hours
      6 hours
      8 hours
      10 hours or more

Page 4: How You See Yourself

The question below identifies 10 different body attributes. Please rank order these body attributes from that which has the greatest impact on your physical self-concept (rank this as a "9"), to that which has the least impact on your physical self-concept (rank this as a "0").

Note: It does not matter how you describe yourself in terms of each attribute. For example, fitness level can have a great impact on your physical self-concept regardless of whether you consider yourself to be physically fit, not physically fit, or any level in between.

Please consider all attributes at the same time and then assign a rank between 0 and 9 by writing this in the space provided for each attribute.

IMPORTANT: Do not assign the same rank to more than one attribute! For example, do not rank physical coordination and health as both 9, each must have a different rank.

When considering your self-concept...

9 = Greatest impact
8 = Next to greatest impact
1 = Next to least impact
0 = Least impact

1. Please rank the following body attributes how much they impact on your physical self-concept? Please do not assign the same rank to more than one attribute

   a. What rank do you assign to physical coordination? ....
   b. What rank do you assign to health? ………….
   c. What rank do you assign to weight? ……………
   d. What rank do you assign to strength? …………...
   e. What rank do you assign to sex appeal? …………..
   f. What rank do you assign to physical attractiveness? ………….
   g. What rank do you assign to energy level (e.g. stamina)? ………….
   h. What rank do you assign to firm/ sculpted muscles? ……………
   i. What rank do you assign to physical fitness level? ……………
   j. What rank do you assign to measurements (e.g. chest, waist, hips)? …

Page 5: How You See Yourself Continued

1. For each item, please select the answer that best characterises your attitudes or behaviours.

1= Strongly Disagree, 2=Disagree, 3=Somewhat Disagree, 4= Neither Agree nor Disagree, 5=Somewhat Agree, 6=Agree, 7=Strongly Agree

   a. I rarely think about how I look.
   b. I think it is more important that my clothes are comfortable than whether they look good on me.
   c. I think more about how my body feels than how my body looks.
   d. I rarely compare how I look with how other people look.
   e. During the day, I think about how I look many times.
   f. I often worry about whether the clothes I am wearing make me look good.
   g. I rarely worry about how I look to other people.
   h. I am more concerned with what my body can do than how it looks.

2. Over the past two weeks, how often have you been bothered by any of the following problems?

   a. Little interest or pleasure in doing things
   0 = Not at all 1 = Several days 2 = More than half the days 3 = Nearly every day

   b. Feeling down, depressed, or hopeless
   0 = Not at all 1 = Several days 2 = More than half the days 3 = Nearly every day

Page 6: Your Feelings about Body Shape, Weight and Eating

1. On how many of the past 7 days… (0 days=0, 1-2 days=1, 3-5 days=2, 6-7 days=3)

a) Have you been deliberately trying to limit the amount of food you eat to influence your weight or shape (whether or not you have succeeded)?
b) Have you gone for long periods of time (e.g. 8 or more waking hours) without eating anything at all in order to influence your weight or shape?
c) Has thinking about food, eating or calories made it very difficult to concentrate on things you are interested in (such as working, following a conversation or reading)?
d) Has thinking about your weight or shape made it very difficult to concentrate on things you are interested in (such as working, following a conversation or reading)?
e) Have you had a definite fear that you might gain weight?
f) Have you had a strong desire to lose weight?
g) Have you tried to control your weight or shape by making yourself sick (vomit) or taking laxatives?
h) Have you exercised in a driven or compulsive way as a means of controlling your weight, shape or body fat, or to burn off calories?
i) Have you had a sense of having lost control over your eating (at the time that you were eating)?
j) On how many of these days (i.e. days on which you had a sense of having lost control over your eating) did you eat what other people would regard as an unusually large amount of food in one go?

2. Over the past 7 days… (Not at all=0, Slightly=1, Moderately=2 and Markedly=3)

a) Has your weight or shape influenced how you think about (judge) yourself as a person?
b) How dissatisfied have you been with your weight or shape?

Page 7: Thank You Very Much for Taking Part in this Study

If you have found the survey raised issues that you haven't really thought about before and would like to speak to someone about these thoughts and feelings, we suggest you talk to someone close to you, such as a parent, doctor or counsellor. We would also recommend looking at these websites for more support and guidance:

www.youngminds.org.uk

www.bodygossip.org

www.themix.org

www.youthaccess.org.uk

If you would like to talk to someone from the Northern School of Contemporary Dance, please contact Tracy Witney (Safeguarding Lead), her email address is tracy.witney@nscd.ac.uk and her phone number is 0113 219 3006.

Thank you for all your help! A £1 donation per each completed questionnaire will be donated to the student hardship fund, which helps financially support dance students with their education.

If you have any questions, please feel free to contact the researcher.

Sarah Morrow

umsam@leeds.ac.uk

7.5. Appendix E: Codebook

The Image:

- Participant number: ?
- Image number: ?
- Dance genre: 0=Ballet, 1=Contemporary
- Gender of participant: 0= Male 1= Female
- Image type:
    - Selfie (visible phone/contains 'selfie' label): 0 = No, 1 = Yes, 99 = Unable to determine
    - Solo image: 0= No 1= Yes
    - Group image: 0= No 1= Yes
- Related to dance community: Are they in ballet or contemporary dance attire? 0 = No, 1 = Yes,
- Active dance pose: 0 = No, 1 = Yes,
- Number of nametags: infinite
- Number of hashtags: infinite
- Caption focuses on their own physical appearance and / or is self-objectifying in nature: 0= No, 1= Yes, 99= Unable to determine
- Head and shoulder shot (Less than 25% of body on show, if chest is visible must be coded as half body): 0 = No, 1 = Yes
- Half body (Up to 50% on show either top half or bottom half): 0 = No, 1= Yes
- Full body (Over 50% on show): 0 = No, 1 = Yes

Appearance-Ideal Coding:

- **Body fat:** The Contour Drawing Figure Rating Scale – CDFRS (Thompson & Gray, 1995): 1-9, 99 = Unable to determine.
    - **Body fat ideals:** Females – Rated as 3 or below: 0 = No, 1 = Yes. Males – Rated between 3 and 5: 0 = No, 1 = Yes.
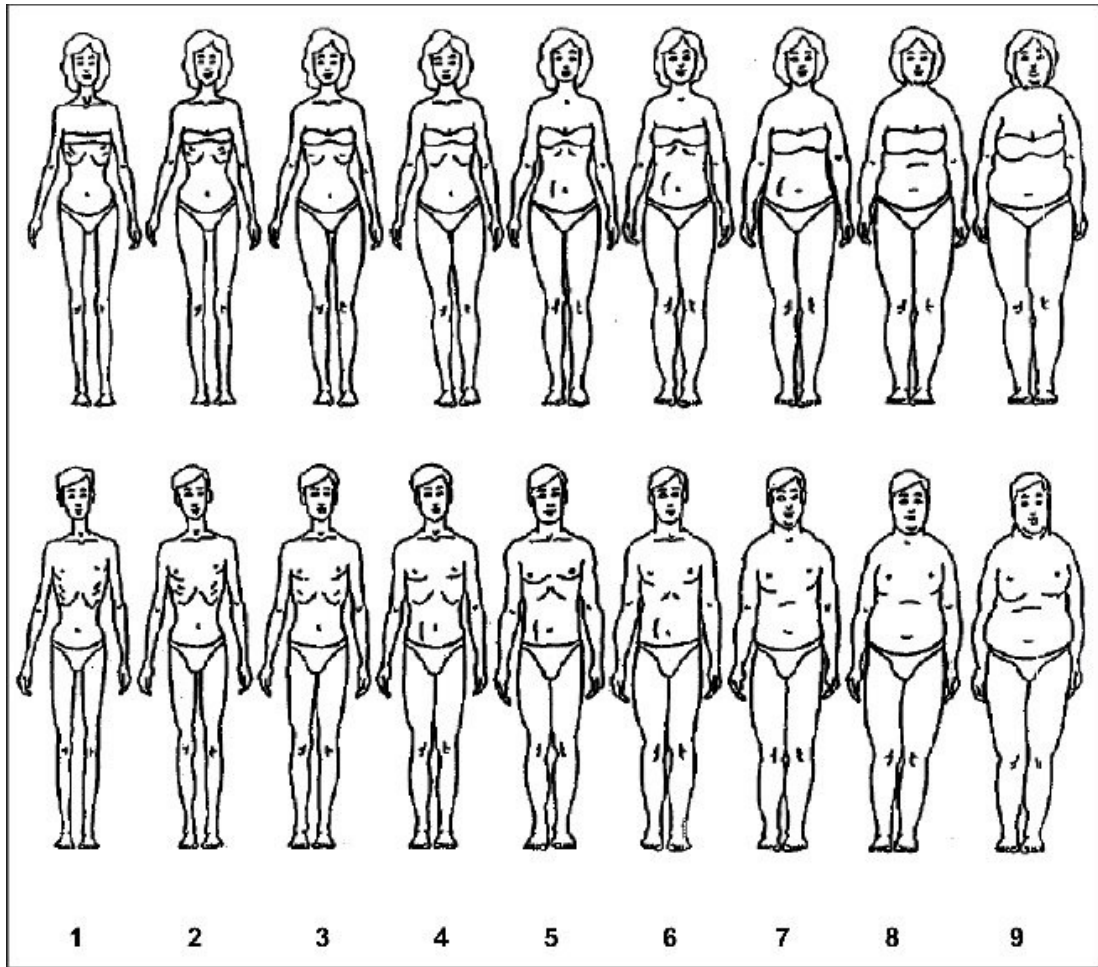
Figure 1. The Contour Drawing Figure Rating Scale (CDFRS)

- **Muscularity:** 0 = Little to none, 1 = Visible, 2 = High level, 99 = Unable to determine.
  - **Muscularity ideals:** Females – little to none or visible: 0 = No, 1 = Yes. Males – visible or highly visible: 0 = No, 1 = Yes.
- **Meets facial beauty ideals:** Facial symmetry, blemish-free skin with no obvious spots or discolouration, neat shiny hair / for men a full head of hair or shaved (not bald), straight and white teeth: 0 = No, 1 = Yes, 99 = Unable to determine, anything that deviates from the beauty ideal is given a 0.
- **Meets overall cultured appearance-ideals:** Meets body fat ideals and at least one other fact of idealised appearance: 0 = No, 1 = Yes.

Objectification coding:

- **Face obscured**: A face may be cropped out of the photo or obstructed by a phone: 0 = No, 1 = Yes.

- **Body part other than face is main focus:** Consistent with objectification involving an emphasis on separate body parts of individuals rather than focussing on them as holistic humans: 0 = No, 1 = Yes
  - *If yes, which body part:* 1=arms, 2=legs, 3=cleavage/ chest, 4=abdomen, 5=crotch, 6=buttocks, 7=feet, 8=whole body, 9=hands.
- **Body parts exposed (flesh):** Objectification present when three or more body parts exposed since revealing 75% of the body would be consistent with Fredrickson and Roberts' (1997) observation that objectified women typically show a high proportion of skin.
  - *Arms on display (over 50% of arm):* 0 = No, 1 = Yes
  - *Cleavage / chest on display:* 0 = No, 1 = Yes
  - *Abdomen on display:* 0 = No, 1 = Yes
  - *Legs on display (Over 50% on display e.g. above knees to ankles):* 0 = No, 1 = Yes
- **Sexually objectifying / self-sexualising:** Alluring gaze, winking, flirting, posing sexually (e.g. one leg in front of the other with one leg lifted and tilted, arching back, focus on crotch or having a phallic prop, sexualised pose with another), sexual teasing, unbuttoned or ripped or partially / fully open clothing, wearing underwear or swimwear, wearing lingerie and / or pouting while tilting head suggestively to the camera: 0 = Absent, 1 = present, 99 = Unable to determine.
- **Contains one or more element of objectification:** 0 = No, 1 = Yes

Audience Reaction:

- Number of likes: infinite
- Valence of comments:
  - Number of positive comments *(compliments about appearance, e.g. beautiful, gorgeous, sexy, fit, stunner etc.)*: infinite
  - Number of neutral comments *(ambiguous or unrelated to body image or appearance)*: infinite