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Body Image, Media Influences, and Situational Dysphoria in Individuals with Visible Physical Disabilities

Imagen corporal, influencias de los medios y disforia situacional en personas con discapacidades físicas visibles

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Abstract.

Body image in individuals with visible physical disabilities appears to be an important area of research and investigation, which has received little attention over the years. The purpose of the current descriptive, cross-sectional study was to investigate relationships between the body image construct, possible media influences on body image satisfaction, self-esteem, and the novel variable of situational body image dysphoria in individuals with visible physical disabilities. One hundred fifty-four men and women responded to the measures of interest. Results indicated that appearance satisfaction, weight-related anxiety, pressures from the media, and the internalization of the thin ideal were significant predictors of situational body image dysphoria. Additionally, when controlling for type of disability, females face more difficulties concerning only some of the variables of interest. These findings have important implications for practice with regards to screening measures, the education of healthcare professionals, as well as intervention and rehabilitation programs.

Resumen.

La imagen corporal en personas con discapacidades físicas visibles parece ser un área importante de investigación y estudio, que ha recibido poca atención a lo largo de los años. El propósito del presente estudio transversal descriptivo fue investigar las relaciones entre la construcción de la imagen corporal, las posibles influencias de los medios en la satisfacción con la imagen corporal, la autoestima y la nueva variable de disforia situacional de la imagen corporal en personas con discapacidades físicas visibles. Ciento cincuenta y cuatro hombres y mujeres respondieron a las medidas de interés. Los resultados indicaron que la satisfacción con la apariencia, la ansiedad relacionada con el peso, las presiones de los medios y la internalización del ideal de delgadez fueron predictores significativos de la disforia situacional de la imagen corporal. Además, cuando se controla por el tipo de discapacidad, las mujeres enfrentan más dificultades con respecto a solo algunas de las variables de interés. Estos hallazgos tienen implicaciones importantes para la práctica con respecto a las medidas de detección, la educación de los profesionales de la salud, así como los programas de intervención y rehabilitación.

Keywords.

Body Image; Physical Disability; Media Influences; Self-Esteem; Dysphoria.

Palabras Clave.

Imagen corporal; discapacidad física; influencias de los medios; autoestima; disforia.

1. Introduction

The World Health Organization (WHO, 2011) has estimated that over one-billion people worldwide, 15% of the world's population, have disabilities, and that this number is on the rise. Of these, physical disabilities are the most common type (WHO, 2011). Visible physical disabilities are those that affect physical functioning or restrict mobility, and which are observable and noticeable by others (Goffman, 1963). These include conditions such as quadriplegia, paraplegia, hemiplegia, monoplegia, spinal cord injuries, and amputations. Quadriplegia or tetraplegia is the impairment of sensory and/or motor function in the upper and lower extremities and in the trunk and pelvic region. Paraplegia is the impairment of sensory and/or motor function of the lower limbs, trunk, and pelvic region (Byrne & Waxman, 2004). Hemiplegia ranges from weakness to full paralysis of one side of the body. Monoplegia is the impairment of a specific region of the body (Misulis, 2004). Such disabilities can cause both differences in appearance (e.g., the loss of limb or muscle tone; Chau et al., 2008), as well as in functionality (e.g., mobility, sexual function, and incontinence; Benevento & Sipski, 2002; Vinoski Thomas et al., 2019), and often necessitate the use of mobility aids. As a result, individuals with physical disabilities often feel discomfort with their body image, which has various associated physical, emotional, and social consequences (Bailey et al., 2016; Vinoski Thomas et al., 2019).

Body image is a multifaceted construct encompassing behavioral, perceptual, cognitive, and affective elements of subjective attitudes and perceptions towards one's body (Cash & Pruzinsky, 2002). It is inextricably linked to psychological, social, and sexual functioning (Cash, 2012). There is substantial evidence indicating that individuals with visible physical disabilities face significant challenges with regard to their body image (Bailey et al., 2015; Burns et al., 2010; Holzer et al., 2014; Moin et al., 2009; Taleporos & McCabe, 2001), self-esteem (Nosek et al., 2003), sexual functioning (Kazukauskas & Lam, 2010; Moin et al., 2009; Potgieter & Khan, 2005), social functioning (Nosek et al., 2003), and life satisfaction (Moin et al., 2009). Body image has also been found to significantly contribute to anxiety and depression in individuals with physical disabilities (van Diemen et al., 2017). However, other studies have found that not all individuals with a physical disability face challenges with their self-esteem and body image (Bassett et al., 2009; Bassett & Martin Ginis, 2009; Holzer et al., 2014), suggesting that additional factors may contribute besides the disability itself.

Research strongly suggests that an individual's sociocultural context has more significant influences on their body image than their disability (Bailey et al., 2016; Nosek et al., 2003; Taleporos & McCabe, 2001;

Vinoski Thomas et al., 2019). This poses difficulties for individuals with physical disabilities, as the social environment in which they find themselves is primarily hostile and saturated with social attitudes and stereotypes surrounding body image that are discriminatory and long withstanding (Corrigan & Al-Khouja, 2018; Esmail et al., 2010; Green et al., 2005). This environment is dominated by ideal body images portrayed by the media: thin, tall, young and full-breasted with some visible muscle tone for women (Frederick et al., 2017); visible muscularity leanness and tall height for men (Ridgeway & Tylka, 2005). Overall, the media place more emphasis on women's beauty through the promotion of perfect images of beauty, as well as beauty enhancing products (Hargreaves & Tiggemann, 2004; McKay et al., 2018). Research on individuals without disabilities has shown that this tends to have a more significant effect on body image issues in women than it does on men (Argyrides & Kkeli, 2015a; Murnen et al., 2003).

Qualitative studies have revealed that individuals with physical disabilities not only feel pressure to conform to beauty ideals and to have socially desirable characteristics, but also that failure to do so results in feelings of body dissatisfaction and dysphoric emotions (Atherton & Robertson, 2006; Bailey et al., 2015; Taleporos & McCabe, 2001; Taub et al., 2003; Vinoski Thomas et al., 2019). As a result, individuals with physical disabilities adopt various impression-management strategies aimed at managing their self-presentation, such as the concealment of body parts and the avoidance of social situations, which limit their daily functioning (Bailey et al., 2015; Leary & Kowalski, 1990; Taleporos & McCabe, 2001; Vinoski Thomas et al., 2019). These findings can be explained by Cash (2002), who suggests that dysphoric body-image emotions are driven by appearance-related self-evaluative processes, which are activated in certain situations, for example, those that involve body exposure, social scrutiny or social comparisons. This results in negative body-emotions, or situational body-image dysphoria (Cash, 2002), a construct which, despite convincing evidence suggesting it is a common phenomenon amongst individuals with visible disabilities (Atherton & Robertson, 2006; Bailey et al., 2015; Taleporos & McCabe, 2001; Taub et al., 2003; Vinoski Thomas et al., 2019) has yet to be studied with this population.

A supportive social environment has been shown to be a significant factor in body acceptance in individuals with physical disabilities (Bailey et al., 2015; Taleporos & McCabe, 2002). Individuals who receive support and acceptance from others (Bailey et al., 2015), and feel supported in social contexts (e.g., family, career, sports and education; Taleporos & McCabe, 2002) have been shown to increasingly accept their disability over time. In addition, a supportive social environment has been shown to promote self-esteem and a positive body image (Nosek et al., 2003). Positive effects of support and ac-

ceptance were also observed in individuals with a higher age of onset of their disability (Taleporos & McCabe, 2001), a factor which has been found to present body-image-related difficulties in the assimilation of the disability into the identity (Kedde & van Berlo, 2006).

1.1 The Current Study

Despite the evidence highlighting various challenges faced by individuals with physical disabilities with regard to their body image, and the associated lack of social support, individuals with disabilities remain largely under-represented in the literature on body image (Tiggemann, 2015). There is a lack of research on gender differences with regard to body image constructs in individuals with physical disabilities, and the construct of situational body-image dysphoria has yet to be studied in this population. More specifically, there is a paucity of quantitative research, which has been called for in order to inform the targeted development of healthcare rehabilitation programs (Bailey et al., 2016; Lamarche et al., 2020). Healthcare rehabilitation programs have been found to overlook body image issues, with healthcare professionals often treating the body as an object (Bailey et al., 2016), and lacking the knowledge and confidence to approach the subject (Lamarche et al., 2020). Shpigelman and HaGani (2019), in order to identify a need for the modification of healthcare services to address psychological needs of those with disabilities, and Lamarche et al. (2020) highlight the need to initiate conversations about body image and suggest the implementation of screening measures to detect body image issues early on.

1.2 Purpose of the Study

The purpose of the current study was to quantitatively investigate relationships between the body image construct, possible media influences on body image satisfaction, self-esteem and situational body image dysphoria in individuals with visible physical disabilities. The identification of constructs which contribute to the challenges faced by these individuals in relation to body image could inform the development and implementation of both screening measures and intervention programs designed specifically for this population. With this in mind, the current study employed a descriptive, cross-sectional design to explore the following research questions:

1. Do body image, media influences, and self-esteem play a role in situational body image dysphoria experienced by individuals with physical disabilities?
2. Are there any differences in body image, media influences, self-esteem, and situational body image dysphoria between males and females with physical disabilities if type of disability is controlled for?
3. Are age, body mass index, levels of inhibition due to the disability, perception by others and number of years with the disability associated with body image, media influ-

ences, self-esteem, and situational body image dysphoria?

2. Method

2.1 Participants

Those eligible for the study were men and women who were over 18 years of age, had a visible physical disability, lived in Greece, and were proficient in the Greek language. Individuals with disabilities that were not classed as visible physical disabilities were excluded from the study as the current study investigates the effects of visible physical differences on body image. The final purposive-type sample comprised 154 men and women whose detailed demographics can be found in the beginning of the Results section.

2.2 Measures

2.2.1 Demographics

Participants completed a demographic questionnaire that included questions regarding gender, age, socioeconomic status, weight, height, age of onset of physical disability, level of inhibition due to the disability, level of support from significant others, and level of acceptance of disability by the social environment.

2.2.2 Media Influences

The Greek version of the Sociocultural Attitudes Toward Appearance Questionnaire —3rd version (SATAQ-3; Argyrides et al., 2014; Thompson et al., 2004) was used in order to assess the media influences and the internalization of the thin and athletic ideals. The SATAQ-3 is a 30-item measure that consists of four subscales: internalization of the athletic ideal (Internalization-Athlete), internalization of the thin ideal (Internalization-General), perceived pressures from the media in terms of appearance (Pressures), and whether the media is perceived as a good source of information regarding appearance (Information). Items are scored on a 5-point Likert-type scale ranging from 1 = *definitely disagree* to 5 = *definitely agree*. It has excellent psychometric properties across several populations and ages, with internal Cronbach alpha coefficients ranging from .84 to .93. For the current sample, the Cronbach's alphas were .84; for the Internalization-General, .83; for Internalization-Athlete, .91 for Pressures; and .89 for Information indicating very good to excellent internal consistency.

2.2.3 Body Image Satisfaction, Investment, and Anxiety

Appearance satisfaction, investment, and anxiety about appearance were measured using the Greek version of the Multidimensional Body-Self Relations Questionnaire – Appearance Scales (MBSRQ-AS; Argyrides & Kkeli, 2013; Cash, 2000). Three of the five subscales were used, which addressed constructs relevant to the research questions. The subscales used were the 7-item Appearance Evaluation subscale measuring feelings of physical attractiveness and satisfaction with appearance, the 12-item

Appearance Orientation subscale measuring the extent of investment in appearance, and the 4-item Overweight Preoccupation subscale assessing weight-related anxiety and vigilance. All items were rated on a 5-point Likert-type satisfaction scale ranging from 1 = *strongly agree* to 5 = *strongly disagree* and 1 = *very satisfied* to 5 = *very dissatisfied*. These subscales have been found to have good psychometric properties across men and women and different cultural groups with alpha coefficients above .80. For the current sample, the Appearance Orientation subscale's alpha coefficient was .81, for the Appearance Evaluation was .84, and for the Overweight Preoccupation .85, indicating very good internal consistency.

2.2.4 Self-Esteem

The Greek version of the Rosenberg Self-Esteem Scale (Galanou et al., 2014; Rosenberg, 1965) was used. This is a 10-item measure assessing an individuals' level of global self-worth based on their positive and negative perceptions and beliefs. Participants' responses on the questionnaire are coded on a 4-point Likert-type scale ranging from 1 = *strongly disagree* to 4 = *strongly agree*. The Rosenberg Self-Esteem Scale contains an equal number of positive and negative worded items. It has excellent reported reliability coefficients ranging from .87 to .93. For the current sample, the alpha coefficient was .88, indicating very good internal consistency.

2.2.5 Situational Body Image Dysphoria

The Greek version of the Situational Inventory of Body Image Dysphoria-Short Form (SIBID-S; Argyrides & Kkeli, 2015a; Cash, 2002) was used to measure situational body image dysphoria. The SIBID-S is a short 20-item version of the original 48-item SIBID that assesses negative body image emotions in specific situational contexts. For each of the particular items, participants rate the frequency of dysphoric emotions on a 5-point Likert type scale ranging from 1 = *never* to 5 = *almost always*. Some of the specific situational contexts include social and nonsocial contexts and activities related to grooming, intimacy, exercising, physical self-focus, eating, and appearance alterations (Cash et al., 2004). It has excellent reported reliability coefficients ranging from .87 to .93. The scale has also been validated in individuals with physical disabilities (Argyrides & Anastasiades, 2022). For the current sample, the alpha coefficient was .89, indicating again very good internal consistency.

2.3 Procedure

The current study was carried out following the rules of the Declaration of Helsinki of 1975. Upon ethical approval from the Institutional Review Board, 37 physical disability and special needs associations throughout Greece were contacted and 22 of them (62.9%) agreed to send the questionnaire packets to their members. Five hundred and seventy (570) hard copy questionnaire packets including the measures stated above were sent to

these 22, covering all the geographical areas of the country. The organizations were contacted based on a) geographical region (in order to have a representation from as many areas of the country as possible), b) approved by the relevant government body and c) approval from the executive director of the association. Of the 570 hard copies sent out by the 22 organizations to their members, one hundred sixty four (28.8% response rate) members fully filled the questionnaire packets and were returned to the authors. Ten of these members had other forms of disabilities (e.g., vision problems, mental retardation), and, therefore, were not included in this study, bringing the final sample size to 154. Participation in the study was voluntary and a signed written informed consent was obtained from all participants.

2.4 Data Analysis

The data analysis was carried out using SPSS statistical software version 25 (IBM SPSS Inc., Chicago, Illinois, USA). Initial preliminary analyses conducted included descriptive statistics, tests for normal distribution, analysis of variance, and checks for missing data. A stepwise multiple regression analysis was carried out to explore the first research question, which was to investigate the role body image, media influences, and self-esteem play in situational body image dysphoria. A Multiple Analysis of Covariance (MANCOVA) was carried out to investigate the second goal of the study which was to explore differences in the variables of interest based on gender, while keeping the type of disability as a covariate. Finally, a Pearson product moment correlation matrix was carried out with a Bonferroni adjustment to explore the third research question assessing whether age, levels of inhibition, perception by others and age of onset are associated with body image, media influences, self-esteem, and situational body image dysphoria.

3. Results

3.1 Demographic Characteristics

The purposive sample of the study consisted of 154 men and women with visible physical disabilities (75 females, 49%; 79 males, 51%) ranging in age from 18 to 80 years ($M = 42.7$; $SD = 13.3$). The types of physical disability were quadriplegia ($n = 28$; 18%), hemiplegia ($n = 13$; 8%), paraplegia ($n = 54$; 35%), monoplegia ($n = 31$; 20%), amputation ($n = 6$; 4%), spinal cord injury ($n = 15$; 10%), and other not reported physical disability ($n = 7$; 5%). Based on participants' self-reported height and weight, their Body Mass Index was calculated. Four participants (3%) were in the underweight category, 59 (38%) in the normal weight category, 59 (38%) in the overweight category, and 32 (21%) in the obese category. Most participants lived in urban areas (72%) as compared to rural (28%) areas. The majority of the participants had middle socioeconomic status (SES). More specifically, 13% had low SES, 23% had middle-low SES, 54% had middle SES,

9% had middle-high SES, and 1% had high SES. When asked about the perceived degree of inhibition in one's daily functionality due to their physical disability, 13% of participants reported a small degree of inhibition, 35% a medium degree of inhibition, 33% a serious degree of inhibition, and 19% a severe degree of inhibition. Finally, the number of years with a physical disability ranged from 0 to 65 years ($M = 22.9$; $SD = 16.1$).

3.2 Situational Body Image Dysphoria

In order to address the first research question, a stepwise multiple regression analysis was conducted to evaluate how well the measures of interest predicted situational body image dysphoria. The predictors were the internalization of the thin and athletic ideals, perceived pressures from the media, body image satisfaction, investment in appearance, weight-related anxiety, and self-esteem, and the criterion variable was situational body image dysphoria. BMI was used as a covariate. The detailed findings of the multiple regression can be found in Table 1. The analysis revealed that four of the seven predictors were significant; $F(5, 148) = 42.91$, $p < .001$, and accounted for 57.8% of the variance of situational body image dysphoria; $R^2 = .59$, $R^2_{\text{adjusted}} = .58$. Situational body image dysphoria was primarily predicted by satisfaction with appearance; $R^2 = .34$. Followed by pressures from the media, which added significantly another 14.4% to the overall variance; $R^2 = .49$. Situational body image dysphoria was also significantly predicted to a lesser extent by the internalization of the thin ideal which added another 4.7% to the overall variance; $R^2 = .54$, and weight-related anxiety adding another 4.3%; $R^2 = .58$.

3.2.1 Gender Differences

In order to address the second research question, a Multiple Analysis of Covariance was used to identify significant differences between males and females on the variables of investment in appearance, appearance-related anxiety, internalization of the thin ideal, the perception of the media as a good source of information, and situational body image dysphoria while keeping the type of disability as a covariate. As seen in Table 2, females scored significantly higher than males on investment in appearance, internalization of the thin ideal and feeling pressures from the media concerning their appearance.

3.3 Age, Level of Inhibition, Years with the Disability, and Perceptions of Others

To assess the relationship between the age of the individual, level of inhibition based on the disability, the number of years with the disability, and positive/negative perception of the disability by others, and the measures of body image, media influences, self-esteem, and situational body image dysphoria, a Pearson product moment correlation matrix was carried out with a Bonferroni adjustment. This analysis revealed a significant negative correlation between the age of the participant and

satisfaction with appearance; $r = -.20$, $p = .01$, investment in appearance; $r = -.22$, $p = .006$, and internalization of the thin ideal; $r = -.18$, $p = .002$. This implies that as individuals grow older, they have significantly lower levels of overall satisfaction with their appearance, investment with their appearance, and lower levels of the internalization of the thin ideal. Concerning body mass index (BMI), the only significant relationship was found between BMI and satisfaction with appearance ($r = -.32$, $p < .001$) where, as BMI increased, satisfaction with appearance decreased. No other significant relationship was found with any other variable.

The correlational analysis also revealed a significant negative relationship between the level of inhibition due to the disability and both satisfaction with appearance; $r = -.31$, $p = .000$, and global self-esteem; $r = -.20$, $p = .011$. This implies that individuals who experience high levels of inhibition in their daily functionality have lower levels of self-esteem and overall satisfaction with their appearance. Moreover, negative attitudes by others was significantly related to appearance satisfaction; $r = -.28$, $p = .001$, self-esteem; $r = -.38$, $p < .001$, and situational body image dysphoria; $r = .22$, $p = .007$. This indicates that the more negatively the disability is perceived by others, the less appearance satisfaction and self-esteem, and the more dysphoria is present in social situations.

4. Discussion

This study set out to explore the relationships between body image, media influences, self-esteem, and situational body image dysphoria in individuals with visible physical disabilities. It addressed the significant gap in the literature on body image in individuals with physical disabilities (Tiggemann, 2015), as well as the need to explore factors related to body image in these individuals quantitatively, in order to inform the development of screening measures and intervention programs (Bailey et al., 2016; Lamarche et al., 2020). Overall, the findings highlight the significance of sociocultural influences on body image concerns and situational dysphoria faced by individuals with physical disabilities, as well as the importance of social support in reducing the negative impact of these issues on daily functioning.

The first important finding was that issues related to body image significantly predict the extent to which individuals experience dysphoric emotions in specific situations. The strongest predictors of situational dysphoria were appearance satisfaction, internalization of the thin ideal, pressures from the media, and weight-related anxiety, respectively. These factors were found to be stronger predictors of situational body image dysphoria than global self-esteem. These findings are consistent with previous research (Atherton & Robertson, 2006; Bailey et al., 2015; Taleporos & McCabe, 2001; Taub et al., 2003; Vinoski Thomas et al., 2019), which high-

Table 1

Multiple Regression of Participants' Situational Body Image Dysphoria

| Independent Predictor Variables | B | S.E. | β | <i>t</i> | Sig. |
|--|-------|------|---------|----------|--------|
| MBSRQ appearance evaluation (feelings of attractiveness) | -1.50 | .32 | -.34 | -4.71 | .000** |
| MBSRQ overweight preoccupation (weightrelated anxiety) | .76 | .32 | .14 | 2.39 | .018* |
| SATAQ-3 pressures from media | .61 | .19 | .21 | 3.18 | .002** |
| SATAQ-3 internalization of thin ideal | .67 | .17 | .24 | 3.98 | .000** |

Note. *N* = 154.

Table 2

Independent Sample T-test Results Comparing Males and Females on the Variables of Interest

| | Men | | Women | | <i>F</i> (1, 151) | <i>p</i> |
|--|----------|-----------|----------|-----------|-------------------|----------|
| | <i>M</i> | <i>SD</i> | <i>M</i> | <i>SD</i> | | |
| MBSRQ overweight preoccupation (weightrelated Anxiety) | 8.18 | 3.58 | 10.07 | 3.24 | 2.89 | .199 |
| MBSRQ appearance evaluation (feelings of attractiveness) | 21.87 | 4.01 | 21.79 | 4.32 | .11 | .897 |
| MBSRQ appearance orientation (investment in appearance) | 37.72 | 7.13 | 41.43 | 8.24 | 8.82 | .003** |
| SATAQ-3 internalization of the thin ideal | 18.78 | 5.35 | 21.65 | 7.34 | 7.63 | .006** |
| SATAQ-3 internalization of the athletic ideal | 11.58 | 3.98 | 11.64 | 3.61 | .008 | .930 |
| SATAQ-3 pressures | 13.77 | 5.69 | 16.45 | 6.80 | 2.94 | .016* |
| SATAQ-3 information | 23.76 | 6.68 | 25.88 | 5.95 | 2.82 | .232 |
| Rosenberg global self-esteem | 29.81 | 4.11 | 30.75 | 4.57 | 1.82 | .179 |
| Situational body image dysphoria | 24.19 | 17.59 | 26.51 | 18.87 | .503 | .479 |

Note. *N* = 154 (75 women and 79 men). **p* < .01. ***p* < .001.

light the appearance-related concerns that individuals with physical disabilities face as a result of sociocultural attitudes. These attitudes promote an idealized image of beauty featuring socially desirable characteristics, which may be unattainable for individuals without physical disabilities, and even more so for those with physical disabilities (Bailey et al., 2016). Despite this, individuals with physical disabilities strive for “normalcy” and socially desirable characteristics and engage in self-comparisons, which result in a poorer body image, and the subsequent adoption of various coping strategies including the avoidance of social situations (Bailey et al., 2016).

The second analysis found that investment in appearance, internalization of the thin ideal, and feeling pressured from the media concerning appearance were all significantly higher for women than for men. This finding is in agreement with qualitative research suggesting that women are more likely to develop a self-critical perspective of their body image, and experience body image dissatisfaction due to the gendered social context by which they are surrounded (Bailey et al., 2016; Taub et al., 2003). In this context, more emphasis is generally placed on women’s physical attractiveness than men’s (Argyrides & Kkeli, 2015b; Hargreaves & Tiggemann, 2004), through both the portrayal of idealistic images by the media and the widespread promotion of beauty enhancing products by the beauty industry (Mckay et al., 2018). Similar differences in the internalization of this thin beauty ideal (with women more likely to inter-

nalize than men) have also been observed in individuals without disabilities (Argyrides & Kkeli, 2015b; Murnen et al., 2003), suggesting that having a physical disability does not largely affect the tendency for women to internalize the thin ideal.

Considering the emphasis that is placed on women’s beauty over men’s, it is not surprising that the results showed that women perceive significantly more pressure from the media than men. This might explain why women are more likely to invest in their appearance. This is a significant finding as it suggests that focusing on changing women’s perceptions about the media as a good source of information, and facilitating the interpretation of such information in a body protective manner, might work to reduce body image dysphoria in social situations. Therefore, these findings highlight the significance of societal pressures as a source of body image-related difficulties in women with physical disabilities, and suggest that these are not as influential to men with physical disabilities.

The final analysis revealed four main findings. First, results showed that as age increases, individuals are less satisfied with their appearance, invest less in their appearance and have lower levels of thin ideal internalization. This is in agreement with previous research which found similar findings in middle-age and older women (Tiggemann & McCourt, 2013), as well as other research claiming that younger individuals are more susceptible to the thin ideal internalization and experience more

body image dissatisfaction (Mousoulidou et al., 2020). These trends seem to be present in individuals with disabilities as well.

The second finding of this analysis showed that individuals with higher levels of inhibition due to their disability have low levels of satisfaction with their appearance and low self-esteem. This is in line with previous research, which found physical disability to limit opportunities in certain health behaviors, and low self-cognition and self-esteem to be related to greater levels of self-isolation, poorer levels of education, lower rates of salaried employment and poorer quality of intimate relationships in individuals with physical disabilities (Nosek et al., 2003).

It is notable, however, that the current results revealed no significant association between levels of inhibition due to the disability and media influences or situational body image dysphoria. This is surprising in light of the findings of previous research that suggests that feelings of body image dysphoria in social situations leads individuals to be more inclined to avoid certain situations and behaviors (Bailey et al., 2016; Taleporos & McCabe, 2001; Vinoski Thomas et al., 2019), and that individuals with physical disabilities tend to internalize social attitudes, which affects their psychological and daily functioning (Taleporos & McCabe, 2002). This finding might have been affected by the fact that “level of inhibition of daily functioning” was measured using a single question included in the demographic questionnaire. As the construct of “level of inhibition of daily functioning” is broad, and “daily functioning” is something which is unique to each individual, it is possible that the interpretation of this question varied among participants, who responded accordingly. For example, daily functioning might have implied self-care activities for some, while for others, this might have implied participating in sports activities or going to work. The use of a more comprehensive measure might thus have improved content validity and strengthened this analysis.

Finally, results found that appearance satisfaction, self-esteem, and situational body image dysphoria were inversely related to negative perceptions of the disability by others. These findings support those of previous studies which have repeatedly demonstrated the significance of the attitudes and perceptions of others on body-image-related issues (Bailey et al., 2015, 2016; Nosek et al., 2003; Taleporos & McCabe, 2002). Taleporos and McCabe (2002) suggest that individuals with physical disabilities tend to internalize the perceptions of others towards their disability, whether negative or positive, affecting their body image satisfaction. The implications of this are twofold; whilst negative perceptions of others have a significant negative effect on body image issues (Bailey et al., 2016; Taleporos & McCabe, 2002), positive perceptions and supportive attitudes can promote body image satisfaction and acceptance (Bailey et al., 2015; Nosek et al., 2003; Taleporos & McCabe, 2002) as well as body

esteem (Taleporos & McCabe, 2001). These findings highlight the significance of a supportive social environment in supporting individuals with physical disabilities.

4.1 Implications for Practice

The results of the current study have implications for practice with regards to screening measures, the education of healthcare professionals, as well as intervention and rehabilitation programs. Overall, the findings reiterate the importance of addressing body image concerns in individuals with physical disabilities. The pertinence of body image-related-issues to those with physical disabilities and their role in situational dysphoria, as well as the prevalence of these issues in women, should be emphasized to healthcare professionals through the delivery of seminars and education programs. Developing a better understanding of these factors will assist healthcare professionals in being more alert to recognizing body image distress, and initiate much needed conversation surrounding these issues. Additionally, the constructs identified in this study as significant contributors to situational dysphoria could be included in screening measures designed to detect body-image-related difficulties in individuals with physical disabilities.

Until now, most body image intervention programs have been tailored for one specific population only, mostly adolescent girls or young adult women (Albertson et al., 2015). Simultaneously, there is a significant lack of, and clear need for, intervention programs targeted specifically for individuals with physical disabilities (Bailey et al., 2016; Lamarche et al., 2020). The current findings could be used to inform the development of adapted intervention programs aimed at decreasing situational dysphoria by focusing on the reduction of dissatisfaction with appearance, pressures from the media, internalization of the thin ideal and weight-related anxiety. Psychoeducational intervention programs delivered in a group format over multiple sessions could include activities aimed at developing knowledge and skills that promote the interpretation of societal attitudes and pressures, and unrealistic beauty ideals in a realistic and body protective manner. This is an approach which has been successfully adopted by larger, empirically supported intervention programs aimed at individuals without physical disabilities, such as the Body Project (Stice et al., 2013). It may therefore be worthwhile to assess the efficacy of such intervention programs in individuals with visible physical disabilities.

4.2 Limitations and Future Research

The findings of the current study should be interpreted in light of the following limitations. Firstly, the correlational nature of the results as well as the effect sizes of the correlation coefficients found indicate that results should be interpreted with caution and no generalizability can be drawn. Secondly, even though the main mea-

sure of the study assessing situational dysphoria has been validated in individuals with physical disabilities (Argyrides & Anastasiades, 2022), some of the other body image measures have not yet been validated in individuals with disabilities (Bailey & Gammage, 2020). The use of such measures therefore relies on the findings of qualitative studies, which suggest that body image constructs do not differ significantly for individuals with disabilities (e.g. Bailey et al., 2015). The fact that the findings of the current study had very good to excellent internal consistency coefficients and reflect the findings of the general population are encouraging and should be assessed further. Convergent mixed method designs could prove insightful for future research in identifying any discrepancies between the constructs as measured quantitatively, and their subjective meaning for individuals with disabilities (Bailey & Gammage, 2020; Moffatt et al., 2006). Considering the lack of confirmation of the validity of some of the instruments used for this population (Thomas et al., 2020), future studies could focus on using confirmatory factor analysis to validate these measures for individuals with disabilities, or develop new instruments. These could be used for screening for body image issues in healthcare settings, and open avenues for future research.

Thirdly, it is also important to consider that the conceptualization of the body image ideal construct can vary enormously between cultures and distinct populations (Thomas et al., 2020), especially since communities all over the world are becoming increasingly multicultural with ensuing globalization. Variability between cultural norms should be kept in mind in generalizing the findings of the current study. Further studies might explore attitudes towards individuals with physical disabilities, and their associated effects on body image issues across different cultures. Such data would be useful in the design and implementation of culturally sensitive intervention plans.

Fourthly, even though the current study used constructs related to negative body image and focused mainly on appearance-related aspects of body image, increasing evidence supports the efficacy of intervention plans focused on enhancing positive aspects of body image as opposed to reducing the negative aspects (Alleva et al., 2017; Bailey & Gammage, 2020). Positive body image includes the constructs of body functionality and functionality appreciation, which have been found to play a significant role in body image in individuals with physical disabilities (Vinoski Thomas et al., 2019). Future studies might stimulate the advancement of positive body image theory and measurement in this population by exploring body functionality quantitatively or using mixed-methods designs. This offers a promising new avenue for research and intervention programs that might focus on the enhancement and appreciation of positive body attributes in supporting individuals with physical disabili-

ties. Finally, the wide age range of the participants could be considered as a limitation in the generalizability of the results. Future studies may benefit more from assessing these constructs in a more targeted age group.

5. Conclusion

The literature on body image in individuals with physical disabilities remains in its infancy despite significant body-image-related difficulties faced by this population. This study advances the current understanding of these issues through the identification of body image and weight-related concerns and the internalization of beauty ideals portrayed by the media, as constructs which significantly contribute to the dysphoria experienced by individuals with physical disabilities in specific social situations. Results highlight the significant role played by sociocultural factors on body image difficulties, and underline the need for the provision of social support for individuals with visible physical difficulties. These findings potentially provide direction for the design and implementation of much needed screening procedures and targeted intervention and rehabilitation programs in healthcare settings.

References

- Albertson, E. R., Neff, K. D., & Dill-Shackleford, K. E. (2015). Self-Compassion and Body Dissatisfaction in Women: A Randomized Controlled Trial of a Brief Meditation Intervention. *Mindfulness*, *6*(3), 444–454. <https://doi.org/10.1007/s12671-014-0277-3>
- Alleva, J. M., Tylka, T. L., & Diest, A. M. (2017). The Functionality Appreciation Scale (FAS): Development and psychometric evaluation in U.S. community women and men. *Body Image*, *23*, 28–44. <https://doi.org/10.1016/j.bodyim.2017.07.008>
- Argyrides, M., & Anastasiades, E. (2022). Validation of the Greek Adaptation of the Situational Inventory of Body Image Dysphoria-Short Form (SIBID-S) among Individuals with Physical Disabilities. *North American Journal of Psychology*, *24*, 381–394
- Argyrides, M., & Kkeli, N. (2013). Multidimensional Body-Self Relations Questionnaire-Appearance Scales: Psychometric Properties of the Greek Version. *Psychological Reports*, *113*(3), 885–897. <https://doi.org/10.2466/03.07.PR0.113x29z6>
- Argyrides, M., & Kkeli, N. (2015a). Predictive factors of disordered eating and body image satisfaction in cyprus: Predictors of Disordered Eating in Cyprus. *International Journal of Eating Disorders*, *48*(4), 431–435. <https://doi.org/10.1002/eat.22310>

- Argyrides, M., & Kkeli, N. (2015b). Validation of the factor structure of the Greek adaptation of the Situational Inventory of Body-Image Dysphoria-Short Form (SIBID-S). *Eating and Weight Disorders, 20*(4), 491–496. <https://doi.org/10.1007/s40519-015-0194-z>
- Argyrides, M., Kkeli, N., & Kendeou, P. (2014). Validation of the factor structure of the Greek adaptation of the Sociocultural Attitudes Towards Appearance Questionnaire (SATAQ-3). *Body Image, 11*(3), 201–205. <https://doi.org/10.1016/j.bodyim.2014.02.003>
- Atherton, R., & Robertson, N. (2006). Psychological adjustment to lower limb amputation amongst prosthesis users. *Disability and Rehabilitation, 28*(19), 1201–1209. <https://doi.org/10.1080/09638280600551674>
- Bailey, K. A., & Gammage, K. L. (2020). Applying Action Research in a Mixed Methods Positive Body Image Program Assessment With Older Adults and People With Physical Disability and Chronic Illness. *Journal of Mixed Methods Research, 14*(2), 248–267. <https://doi.org/10.1177/1558689819871814>
- Bailey, K. A., Gammage, K. L., Ingen, C., & Ditor, D. S. (2015). “It’s all about acceptance”: A qualitative study exploring a model of positive body image for people with spinal cord injury. *Body Image, 15*, 24–34. <https://doi.org/10.1016/j.bodyim.2015.04.010>
- Bailey, K. A., Gammage, K. L., Ingen, C., & Ditor, D. S. (2016). Managing the stigma: Exploring body image experiences and self-presentation among people with spinal cord injury. *Health Psychology Open, 3*(1), 205510291665009. <https://doi.org/10.1177/2055102916650094>
- Bassett, R. L., & Martin Ginis, K. A. (2009). More than looking good: Impact on quality of life moderates the relationship between functional body image and physical activity in men with SCI. *Spinal Cord, 47*(3), 252–256. <https://doi.org/10.1038/sc.2008.114>
- Bassett, R. L., Martin Ginis, K. A., & Buchholz, A. C. (2009). A pilot study examining correlates of body image among women living with SCI. *Spinal Cord, 47*(6), 496–498. <https://doi.org/10.1038/sc.2008.174>
- Benevento, B. T., & Sipski, M. L. (2002). Neurogenic bladder, neurogenic bowel, and sexual dysfunction in people with spinal cord injury. *Physical Therapy, 82*(6), 601–612
- Burns, S. M., Hough, S., Boyd, B. L., & Hill, J. (2010). Men’s Adjustment to Spinal Cord Injury: The Unique Contributions of Conformity to Masculine Gender Norms. *American Journal of Men’s Health, 4*(2), 157–166. <https://doi.org/10.1177/1557988309332690>
- Byrne, T. N., & Waxman, S. G. (2004). Paraplegia and S=Spinal Cord Syndromes. In W. G. Bradley, R. B. Daroff, G. M. Fenichel, & M. D. Jankovic (Eds.), *Neurology in Clinical Practice: Principles of diagnosis and management* (4th, pp. 351–366). Elsevier.
- Cash, T. F. (2000). *Multidimensional Body-Self Relations Questionnaire user’s manual* (3rd). Old Dominion University Press. <http://www.body-image.com>
- Cash, T. F. (2002). The situational inventory of body-image dysphoria: Psychometric evidence and development of a short form. *International Journal of Eating Disorders, 32*(3), 362–366. <https://doi.org/10.1002/eat.10100>
- Cash, T. F. (Ed.). (2012). *Body image: A handbook of theory, research, and clinical practice* (2. ed., rev). Guilford Press.
- Cash, T. F., Melnyk, S. E., & Hrabosky, J. I. (2004). The assessment of body image investment: An extensive revision of the appearance schemas inventory. *International Journal of Eating Disorders, 35*(3), 305–316. <https://doi.org/10.1002/eat.10264>
- Cash, T. F., & Pruzinsky, T. (2002). Future challenges for body image theory, research and clinical practice. In T. F. Cash & T. Pruzinsky (Eds.), *Body image: A handbook of theory, research and clinical practice* (2nd, pp. 509–516). The Guilford Press
- Chau, L., Hegedus, L., Praamsma, M., Smith, K., Tsukada, M., Yoshida, K., & Renwick, R. (2008). Women Living With a Spinal Cord Injury: Perceptions About Their Changed Bodies. *Qualitative Health Research, 18*(2), 209–221. <https://doi.org/10.1177/1049732307312391>
- Corrigan, P. W., & Al-Khouja, M. A. (2018). Three agendas for changing the public stigma of mental illness. *Psychiatric Rehabilitation Journal, 41*(1), 1–7. <https://doi.org/10.1037/prj0000277>
- Esmail, S., Darry, K., Walter, A., & Knupp, H. (2010). Attitudes and perceptions towards disability and sexuality. *Disability and Rehabilitation, 32*(14), 1148–1155. <https://doi.org/10.3109/09638280903419277>
- Frederick, D. A., Daniels, E. A., Bates, M. E., & Tylka, T. L. (2017). Exposure to thin-ideal media affect most, but not all, women: Results from the Perceived Effects of Media Exposure Scale and open-ended responses. *Body Image, 23*, 188–205. <https://doi.org/10.1016/j.bodyim.2017.10.006>
- Galanou, C., Galanakis, M., Alexopoulos, E., & Darviri, C. (2014). Rosenberg Self-Esteem Scale Greek validation on student sample. *Psychology, 5*(8),

- 819–827. <https://doi.org/10.4236/psych.2014.58093>
- Goffman, E. (1963). *Stigma: Notes on the management of spoiled identity*. Prentice Hall.
- Green, S., Davis, C., Karshmer, E., Marsh, P., & Straight, B. (2005). Living Stigma: The Impact of Labeling, Stereotyping, Separation, Status Loss, and Discrimination in the Lives of Individuals with Disabilities and Their Families. *Sociological Inquiry, 75*(2), 197–215. <https://doi.org/10.1111/j.1475-682X.2005.00119.x>
- Hargreaves, D. A., & Tiggemann, M. (2004). Idealized media images and adolescent body image: “Comparing” boys and girls. *Body Image, 1*(4), 351–361. <https://doi.org/10.1016/j.bodyim.2004.10.002>
- Holzer, L. A., Sevelde, F., Fraberger, G., Bluder, O., Kicking, W., & Holzer, G. (2014). Body Image and Self-Esteem in Lower-Limb Amputees. *PLoS ONE, 9*(3), e92943. <https://doi.org/10.1371/journal.pone.0092943>
- Kazukauskas, K. A., & Lam, C. S. (2010). Disability and Sexuality: Knowledge, Attitudes, and Level of Comfort Among Certified Rehabilitation Counselors. *Rehabilitation Counseling Bulletin, 54*(1), 15–25. <https://doi.org/10.1177/0034355209348239>
- Kedde, H., & Berlo, W. (2006). Sexual Satisfaction and Sexual Self Images of People with Physical Disabilities in the Netherlands. *Sexuality and Disability, 24*(1), 53–68. <https://doi.org/10.1007/s11195-005-9003-3>
- Lamarche, L., Bailey, K. A., Awan, A., Risdon, C., Pauw, G., & Vinoski Thomas, E. (2020). Exploring primary care providers’ understandings of body image in patient care. *Body Image, 35*, 161–170. <https://doi.org/10.1016/j.bodyim.2020.09.001>
- Leary, M. R., & Kowalski, R. M. (1990). Impression management: A literature review and two-component model. *Psychological Bulletin, 107*(1), 34–47. <https://doi.org/10.1037/0033-2909.107.1.34>
- Mckay, A., Moore, S., & Kubik, W. (2018). Western beauty pressures and their impact on young university women. *International Journal of Gender and Women’s Studies, 6*(2), 1–11.
- Misulis, K. E. (2004). Hemiplegia and Monoplegia. In W. G. Bradley, R. B. Daroff, G. M. Fenichel, & M. D. Jankovic (Eds.), *Neurology in Clinical Practice: Principles of diagnosis and management* (4th, pp. 337–350). Elsevier.
- Moffatt, S., White, M., Mackintosh, J., & Howel, D. (2006). Using quantitative and qualitative data in health services research - what happens when mixed method findings conflict? [ISRCTN61522-618]. *BMC Health Services Research, 6*(1), 28. <https://doi.org/10.1186/1472-6963-6-28>
- Moin, V., Duvdevany, I., & Mazor, D. (2009). Sexual Identity, Body Image and Life Satisfaction Among Women With and Without Physical Disability. *Sexuality and Disability, 27*(2), 83–95. <https://doi.org/10.1007/s11195-009-9112-5>
- Mousoulidou, M., Argyrides, M., & Ioannou, C. (2020). Body image differences across the life span of Greek-Cypriot women: An investigation examining adolescence, early and middle adulthood. *The European Journal of Counselling Psychology, 8*(1), 43–63. <https://doi.org/10.5964/ejcop.v8i1.178>
- Murnen, S. K., Smolak, L., Mills, J. A., & Good, L. (2003). Thin, Sexy Women and Strong, Muscular Men: Grade-School Children’s Responses to Objectified Images of Women and Men. *Sex Roles, 49*(9/10), 427–437. <https://doi.org/10.1023/A:1025868320206>
- Nosek, M. A., Hughes, R. B., Swedlund, N., Taylor, H. B., & Swank, P. (2003). Self-esteem and women with disabilities. *Social Science & Medicine, 56*(8), 1737–1747. [https://doi.org/10.1016/S0277-9536\(02\)00169-7](https://doi.org/10.1016/S0277-9536(02)00169-7)
- Potgieter, C.-A., & Khan, G. (2005). Sexual Self-esteem and Body Image of South African Spinal Cord Injured Adolescents. *Sexuality and Disability, 23*(1), 1–20. <https://doi.org/10.1007/s11195-004-2076-6>
- Ridgeway, R. T., & Tylka, T. L. (2005). College Men’s Perceptions of Ideal Body Composition and Shape. *Psychology of Men & Masculinity, 6*(3), 209–220. <https://doi.org/10.1037/1524-9220.6.3.209>
- Rosenberg, M. (1965). *Society and the adolescent self-image*. Princeton University Press.
- Shpigelman, C., & HaGani, N. (2019). The impact of disability type and visibility on selfconcept and body image: Implications for mental health nursing. *Journal of Psychiatric and Mental Health Nursing, 26*(3–4), 77–86. <https://doi.org/10.1111/jpm.12513>
- Stice, E., Rohde, P., & Shaw, H. (2013). *The Body Project: A dissonance-based eating disorder prevention intervention (Updated ed.) Facilitator guide*. Oxford University Press.
- Taleporos, G., & McCabe, M. P. (2001). The Impact of Physical Disability on Body Esteem. *Sexuality and Disability, 19*(4), 293–308. <https://doi.org/10.1023/A:1017909526508>
- Taleporos, G., & McCabe, M. P. (2002). Body image and physical disability—Personal perspectives. *Social Science & Medicine, 54*(6), 971–980. [https://doi.org/10.1016/S0277-9536\(01\)00069-7](https://doi.org/10.1016/S0277-9536(01)00069-7)
- Taub, D. E., Fanflik, P. L., & McLorg, P. A. (2003). Body Image among Women with Physical Disabilities: Internalization of Norms and Reactions to Nonconformity. *Sociological Focus, 36*(2), 159–

176. <https://doi.org/10.1080/00380237.2003.10570722>
- Thomas, E. V., Warren-Findlow, J., Reeve, C. L., Webb, J. B., Laditka, S. B., & Quinlan, M. M. (2020). Universal Design for Measurement: Centering the Experiences of Individuals With Disabilities Within Health Measurement Research. *Evaluation & the Health Professions, 44*(3)
- Thompson, J. K., Berg, P., Roehrig, M., Guarda, A. S., & Heinberg, L. J. (2004). The sociocultural attitudes towards appearance scale-3 (SATAQ-3): Development and validation. *The International Journal of Eating Disorders, 35*(3), 293–304. <https://doi.org/10.1002/eat.10257>
- Tiggemann, M. (2015). Considerations of positive body image across various social identities and special populations. *Body Image, 14*, 168–176. <https://doi.org/10.1016/j.bodyim.2015.03.002>
- Tiggemann, M., & McCourt, A. (2013). Body appreciation in adult women: Relationships with age and body satisfaction. *Body Image, 10*(4), 624–627. <https://doi.org/10.1016/j.bodyim.2013.07.003>
- van Diemen, T., Leeuwen, C., Nes, I., Geertzen, J., & Post, M. (2017). Body Image in Patients With Spinal Cord Injury During Inpatient Rehabilitation. *Archives of Physical Medicine and Rehabilitation, 98*(6), 1126–1131. <https://doi.org/10.1016/j.apmr.2016.10.015>
- Vinoski, T., Warren-Findlow, E., Webb, B., J., Quinlan, M. M., Laditka, S. B., & Reeve, C. L. (2019). “It’s very valuable to me that I appear capable”: A qualitative study exploring relationships between body functionality and appearance among women with visible physical disabilities. *Body Image, 30*, 81–92. <https://doi.org/10.1016/j.bodyim.2019.05.007>
- World Health Organization. (2011). *World Report on Disability 2011*. WHO. <https://apps.who.int/iris/handle/10665/44575>