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Citation for final published version:

Ozbek, Selen, Greville, James and Hooper, Nic 2023. The thin-ideal across two cultural contexts: the role of body image inflexibility and the fear of negative evaluation. *Psychology of Popular Media Culture* 10.1037/ppm0000464 file

Publishers page: <https://doi.org/10.1037/ppm0000464>
<<https://doi.org/10.1037/ppm0000464>>

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Abstract

It is well-established that the thin-ideal standard of female beauty adversely influences body satisfaction among women in Western societies, yet comparatively little attention has been given to this effect across different cultural contexts. The present study investigated the impact of exposure to the thin-ideal on women in Turkey and the UK, and whether body image inflexibility or fear of negative evaluation may contribute to any cross-cultural differences. Participants ($N=262$) completed scales of body dissatisfaction, body image inflexibility and fear of negative evaluation before being randomly assigned to view either thin-ideal images or neutral images, after which they completed the body dissatisfaction scale again. Results revealed that participants from both countries experienced decreases in body satisfaction following exposure to the thin-ideal, with this effect most pronounced in the UK sample. Furthermore, body image inflexibility, more so than fear of negative evaluation, predicted greater decreases in body satisfaction. Strategies to improve body image flexibility may thus mitigate the harmful impact of thin-ideal exposure.

Public Policy Relevance Statement: Exposure to the thin-ideal standard of female beauty, which is prevalent in the media, increases women's body dissatisfaction across cultures. This article found that body image inflexibility, more so than fear of negative evaluation, is an important driver of this effect. Public health strategies promoting psychological flexibility may thus reduce vulnerability to the damaging impact of viewing idealised beauty images in the media.

Keywords: female body image; thin-ideal; cross-cultural; media exposure effects; fear of negative evaluation; body image flexibility.

Body dissatisfaction – the negative evaluation of one’s own body – is a considerable source of distress and a predictor of eating disorders among the general population (McLean & Paxton, 2019), and in young women in particular (Karazsia et al., 2017). Body dissatisfaction is influenced by a variety of factors, but one driver that has garnered much recent public interest and research attention is the impact of exposure to the thin-ideal; that is, thin women being presented as the ideal standard of beauty (e.g. Homan et al., 2012; McLaren et al., 2003). Although recent research suggests that a wider diversity of body-ideals is increasingly promoted in popular culture, such as the curvy or athletic body (Betz & Ramsey, 2017), high rates of body dissatisfaction and the desire to lose weight persist globally among women (e.g., Moehlecke et al., 2020; Radwan et al., 2019). Yet, the bulk of research on thin-ideal exposure has been conducted with women in Western societies, chiefly in the US (Xu et al., 2010), with comparatively little investigation of how this phenomenon impacts women living in other countries with different cultures. The current study therefore aimed to compare the extent to which slender beauty ideals negatively impact body dissatisfaction in two different cultural contexts, Turkey and the United Kingdom (UK).

Research evidencing the detrimental impact of the thin-ideal pervades the body image literature. For example, Frederick et al. (2017) found that viewing thin fashion models had a negative impact on perceived body image, which led participants to engage in disordered eating (i.e., calorie restriction) and avoidant behaviours (i.e., wearing swimsuits in public). Swiatkowski (2016) reported that women who were regular consumers of women’s fashion magazines had a higher body dissatisfaction rate and drive towards thinness. Even a five-minute exposure to thin-and-beautiful media images results in an immediate decrease in body satisfaction compared to appearance-neutral images (Dittmar et al., 2009; Tiggemann & Slater, 2013). Despite the apparent ubiquity of this phenomenon, there are reasons to anticipate that this impact may differ across countries and cultures. Prior research has, for instance, demonstrated that ethnic identity affects thin-ideal internalisation, which has been found to be considerably lower in African American women than in their Asian, Caucasian or Latina counterparts (Rakhkovskaya & Warren, 2014).

Turkey represents a particularly interesting culture for examining the impact of idealised beauty standards. Historically, Turkey has long represented a bridge between East and West both geographically and socio-culturally, and has been described as a “melting pot” of Western and Islamic values (Kağıtçıbaşı, 1996; Özkan & Lajunen, 2005). Turkey has undergone considerable social transition in the past few decades, with rapid urbanisation, industrialisation, and Westernisation abetted by mass exposure to European and North American culture through popular media (Genel & Karaosmanoğlu, 2006; Özkan & Lajunen, 2005; Tayfur & Evrensel, 2020). It has been argued in the literature that the thin-ideal is a Western beauty standard and with the increasing Westernisation of developing nations, appearance-related concerns are now becoming more of an issue in non-Western populations (Cattarin et al., 2000; Groesz et al., 2002; Ricciardelli et al., 2007; Xu et al., 2010). Consistent with this, research suggests that rates of body dissatisfaction and eating disorders are on the rise in Turkey and approaching levels comparable to those in Western nations (Tayfur & Evrensel, 2020; Ince, & Yucel, 2022). Research on eating disorders and body image in Turkey has been expanding but remains relatively scarce, and to our knowledge, there has been no prior experimental study that has directly examined the immediate effects of thin-ideal exposure on body image in a Turkish sample, or compared such effects to that of a Western country.

Any emerging cross-cultural differences in the reaction to thin-ideals are likely to be underpinned by specific psychological correlates. Prior research has suggested that a diverse range of factors can exacerbate or mitigate the impact of thin-ideal exposure, ranging from media literacy (McLean et al., 2016) to gratitude (Homan et al., 2014). We opted to focus on two factors in particular in the current study; fear of negative evaluation (FNE) and body image inflexibility (BII). BII has recently been shown to be a potent influence on thin-ideal internalisation across cultures (e.g. Fang et al., 2022; Morton et al., 2020; Tan et al., 2019; Wu et al., 2022) so seems a pertinent variable to consider in this case. FNE meanwhile also is a well-established predictor of appearance-related outcomes but importantly this relationship has been shown to vary cross-culturally. For example, Ahadzadeh et al (2018) evidenced a lack of relationship between body image, body-mass index and FNE in a Malaysian population, exhibiting different patterns to comparable research with Western

populations. Thus, in relation to the impact of the thin-ideal, FNE may be a culturally-specific influence (van Dam-Baggen et al., 2003) while BII may be a universal, culturally-invariant influence (Monestès et al., 2016). Including these variables in the current study allowed an exploration of this hypothesis.

In summary then, the present study will contrast the impact of thin-ideal exposure in Turkey and the UK, and attempt to quantify the role that body image inflexibility and fear of negative evaluation may have in this regard. It is anticipated, regardless of culture, that participants who are exposed to slender female model images will experience greater level of body dissatisfaction than a control group who see neutral images (Homan et al., 2012), and that those with higher levels of body image inflexibility and fear of negative evaluation will report the highest increases in body dissatisfaction (Gilbert & Meyer, 2005; Pearson et al., 2012). Finally, prior research has shown that students from Turkey showed lower FNE than students in a more Westernised society (the US). Taking this into account, we predict that participants from the UK will report greater increases in body dissatisfaction following exposure to thin-ideal images, and that this may be driven by a greater fear of negative evaluation..

Method

Participants

Participants were eligible to take part in the study if they were female, residents of either Turkey or the UK, and aged 18 years or older. The mean age of the participants was 27.41 years ($SD = 2.34$). Exclusion criteria were applied such that those with any clinically diagnosed eating disorders were requested not to take part due to the sensitivity of the topic area.

A power analysis using G*Power for ANCOVA with four independent levels and two dependent variables ($\alpha = .05$, $\text{power} = .95$, medium effect size = .25) determined that a sufficient sample size of 60 participants was necessary in each condition. In total, 325 people took part in the present study, however, data for 63 participants was excluded either for failing to meet nonclinical

sample requirements or withdrawal prior to analysis. Consequently, data were analysed from 262 women; 128 were the residents of the UK (Age $M=28.86$, $SD=9.52$), 60 in the control condition and 68 in the thin-ideal condition; 134 were the residents of Turkey (Age $M=26.06$, $SD=7.30$), 66 in the control condition, and 68 in the thin-ideal condition, providing a sufficient sample size for each condition.

Research Design

The study employed a mixed pretest-posttest design with country (UK vs Turkey) and image type (neutral vs thin-ideal) as the between-subject factors, time (baseline vs post-intervention) as the repeated measure factor, and body image flexibility and fear of negative evaluation as covariates. Body dissatisfaction was the dependent measure.

In a novel aspect of the study, we allowed participants to determine their own level of exposure to the images by placing no restrictions on viewing time. In natural environments, people can choose how long they look at social media images, which may have important mediating effects on the real-world impact of thin-ideal images outside the research laboratory. Therefore, to control for and analyse the effect of this additional source of variability, viewing time was also measured as a covariate.

Materials

Experimental Manipulation: Image Type

Two sets of stimulus materials were generated. Experimental stimuli were 15 images of young White slender fashion models taken from various women's magazines that are released monthly in both Turkey and the UK (i.e., Women's Health, Cosmopolitan). Selecting images from demographic was consistent with the contemporary ideal of female attractiveness that has been promoted in the media in both of the countries studied (Henderson-King et al., 2001). All female models were wearing either tight-fitting clothing or swimsuits. Control stimuli were 15 images of automobiles taken from official websites of companies (i.e., Ford, Volvo) and did not involve any other distracting figures in

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the backgrounds. The images were presented on separate pages and the participants had to click “next”
in order to work through all 15 images.

Measures

Body Image States Scale (BISS; Cash et al., 2002). The Body Image States Scale contains 6 items that assess how people currently feel about their bodies and higher scores indicate a more favourable body image state. In the current research, the measure employed a 7-point Likert type scale (1=extremely dissatisfied, 7=extremely satisfied) and the questions investigated current feelings about one’s overall appearance or weight rather than specific body parts (e.g., “Right now I feel ... with my physical appearance”). The internal reliability scores of the BISS from previous research ranges from .77 to .93, with high levels of validity in five different contexts (Cash et al., 2002; Frederick et al., 2017). As there is no standardised Turkish version of the BISS to date, the first author, who is native Turkish and fluent in English, translated the items independently. The internal consistency scores of the BISS in the current study were excellent, with Cronbach’s alpha scores for pre-test and post-test at .91 and .92, respectively.

Brief Fear of Negative Evaluation Scale (BFNE; Leary, 1983). The Brief Fear of Negative Evaluation Scale contains 12 items and higher scores indicate greater fear of negative evaluation. The item responses were scored on a 5-point Likert-type scale (1=not at all characteristic of me, 5=extremely characteristic of me) and included items that gauged the degree to which one fears negative evaluation from others (e.g., “I worry about what other people will think of me even when I know it doesn't make any difference.”). High levels of validity and internal consistency ($\alpha=.90$) have been reported for scores on the BFNE in previous research (Rodebaugh et al., 2011), and scores on the Turkish version of the BFNE indicate a Cronbach’s alpha score of .94 in a Turkish sample (Koydemir & Demir, 2007). In the current study, the internal reliability score was adequate ($\alpha=.84$).

Body Image-Acceptance and Action Questionnaire (BI-AAQ-5; Basarkod et al., 2017). The BI-AAQ-5 contains 5 items that were developed to measure body image flexibility and higher scores reflect higher psychological inflexibility. All items were measured on a 7-point Likert type

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scale (1=Never true, 7=Always True) and measured whether the person in question was able to interact flexibly with unwanted thoughts and feelings about their body image (e.g., “My thoughts and feelings about my body weight and shape must change before I can take important steps in my life.”). In previous research, the internal reliability scores of BI-AAQ ranged from .84 to .94 (He et al., 2021; Basarkod et al., 2017). For this study, the items of the scale were translated into Turkish by the first author, and the subsequent internal consistency score of the BI-AAQ-5 was excellent ($\alpha=.93$).

Procedure

Ethical approval for this study was obtained from the [masked university] Ethics Committee. Participants were recruited via various social media resources and community websites (i.e., Helpfulpeeps, Postgraduate Support Network). Only females who had not been diagnosed with an eating disorder and currently lived in either Turkey or the UK were eligible to take part in the study. Participation was entirely voluntary with no remuneration.

Participants were first asked to indicate their age and country of residence. All participants then completed the BISS, the BFNE and the BI-AAQ-5 before being randomly allocated via Qualtrics (an online survey software through which the study was conducted) to see either slender fashion model images or appearance-neutral control images (auto-mobiles). Participants were asked to look at each of the images one at a time and to click onto the next image when they were ready. The time spent on the images was recorded to make a comparison between experimental and control groups. Following exposure to the images, all participants were asked to complete the BISS again before being debriefed.

Data Analytic Strategy

Data were exported from Qualtrics and screened for linearity, normality, univariate and multivariate outliers; no serious violations were noted. Descriptive statistics and pre-test post-test scores were calculated across conditions. Between subjects t-tests were conducted to determine whether there were any group-level differences at baseline. A repeated measures ANCOVA was

Control	2.959	.747	2.952	1.570	4.508	1.421	4.595	1.332	27.19	13.31
(Turkey)									5	6
UK	3.280	.810	3.300	1.537	4.033	1.308	3.793	1.371	28.38	18.35
(overall)									6	0
Experimenta	3.357	.793	3.270	1.638	4.008	1.343	3.529	1.450	33.73	21.43
1 (UK)									6	7
Control	3.306	.835	3.333	1.431	4.061	1.280	4.085	1.225	22.47	11.78
(UK)									3	4

NB. Higher mean scores indicating greater scores on the BFNE scale, and higher levels of body dissatisfaction on the BISS measures.

Bivariate correlations for all psychometric variables at pre-test across the entire sample (both experimental and control groups) are reported in Table 2, together with correlations between pretest psychometrics and viewing time in the experimental group only. The BI-AAQ-5 and BFNE were positively correlated, $r(246) = .464, p < .0005$, while, significant negative correlations were found between both BFNE and BISS, $r(246) = -.337, p < .0005$, and BI-AAQ-5 and BISS, $r(246) = -.490, p < .0005$. Viewing time in the experimental group was positively correlated with BISS, $r(246) = .170, p = .008$, and negatively correlated with BFNE, $r(246) = -.174, p = .006$, and BI-AAQ-5, $r(246) = -.191, p = .003$, indicating that those with poorer body satisfaction, less body image flexibility and greater fear of negative evaluation spent less time looking at the images. In the control group, viewing time was not correlated with any of the other study variables (all $ps > .05$).

Table 2 *Bivariate correlations between all psychometric measures at pre-test across all groups (N = 246), and between psychometric measures and viewing time for the intervention group only (N = 126).*

	<u>BFNE</u>	<u>BI-AAQ-5</u>	<u>TIME</u>
BISS	-.337**	-.490**	.290**
BFNE	-	.464**	-.215*

BI-AAQ-5	-	-	-.227*
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* $p < 0.05$, ** $p < 0.005$.

To determine the impact of viewing the thin-ideal versus neutral images on body satisfaction, we performed a repeated measures ANCOVA. A significant time \times image type interaction was found, $F(1,239) = 17.605, p < .0005, \eta_p^2 = .069$, confirming that the image type produced the anticipated effect, with BISS scores declining post-intervention for the thin-ideal group but not for the control group in both countries (see Table 2). This decline was greater for participants in the UK (4.01 to 3.53) than in Turkey (4.40 to 4.25). Although the three-way interaction fell short of significance, $F(1,239) = 2.716, p = .101, \eta_p^2 = .011$, there was a significant interaction between time and country, $F(1,239) = 4.190, p = .042, \eta_p^2 = .017$, corroborating a greater decline in BISS for the UK participants compared to the Turkish participants. There was a significant effect of BFNE, $F(1,239) = 4.444, p = .036, \eta_p^2 = .018$, and a stronger effect of BI-AAQ-5, $F(1,239) = 56.801, p < .0005, \eta_p^2 = .192$. There was no significant effect of viewing time, $F(1,239) = 1.562, p = .213, \eta_p^2 = .006$.

To better understand how the various study variables may predict the impact of viewing thin-ideal images, pre–post BISS change scores were examined using a series of hierarchical regression analyses. Based on the results of the ANCOVA above, BI-AAQ-5 and BFNE were entered into the model first, while viewing time was excluded; Country was entered in the second block. Only BI-AAQ-5 was a significant individual predictor in the first block, while there was a significant R^2 change on adding Country into the model. The best fitting model that was converged upon, $R^2 = .134, F(2,125) = 9.495, p < 0.0005$, included only BI-AAQ-5 and Country as significant predictors of BISS change. The regression coefficients are shown in Table 3.

Table 3 *Regression coefficients for predictors of pre-/post changes in BISS in the experimental group.*

	B	R2	B	t	p
BI-AAQ-5*	.143	.099	.298	3.531	.001

COUNTRY*	.292	.035	.188	2.231	.028
BFNE	-	-	-	.843	.401
TIME	-	-	-	1.236	.219

* variables in the equation

B = unstandardised coefficients, β = standardised coefficients

Discussion

The present study examined cross-cultural differences in the impact of viewing thin-idealised images on body satisfaction between participants in Turkey and the UK, and to our knowledge is the first study to do so. Based on prior research, fear of negative evaluation and body image flexibility were also explored as potential explanatory factors.

Consistent with our hypotheses and prior research, body dissatisfaction, body image inflexibility (BII) and fear of negative evaluation (FNE) were all significantly correlated in our sample. At baseline, Turkish participants scored higher than the UK participants on the BISS, and lower on the BI-AAQ-5 and BFNE, indicating that Turkish participants had better body satisfaction, greater body image flexibility and less FNE compared to the UK participants. Statistical analyses confirmed that, consistent with prior research (Frederick et al., 2017), viewing thin-ideal images negatively impacted body satisfaction for participants both in the UK and in Turkey. This effect was however most pronounced for the UK group, pointing to potential psychosocial or cultural factors that might mediate the impact of viewing such images.

Turkish participants showed lower FNE than the UK participants, consistent with prior research (van Dam-Baggen et al., 2003) and our hypotheses; and FNE in turn was negatively correlated with body dissatisfaction across the sample. Yet despite this, the regression analysis revealed that FNE was not a significant driver of *changes* in body dissatisfaction following thin-ideal exposure. Rather, the most influential factor in this regard was body image flexibility, which emerged

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as the strongest individual predictor of body satisfaction change following the intervention. We also found that participants in Turkey showed on average greater body image flexibility than those in the UK (in contrast with prior research suggesting that average levels of psychological flexibility across the population may not vary much between countries, e.g. Monestès et al., 2016). BII, more so than FNE, may thus have contributed to the greater negative impact of the thin ideal in the UK sample. However, it must be noted that the greater flexibility found in the Turkish sample was only a marginally significant difference. In addition, even after accounting for the effect of body image flexibility, country of origin also remained a significant individual predictor, accounting for a small proportion of the variance in body satisfaction independently of either BII or FNE. Thus, while BII predicts body satisfaction change, and indeed differed between our two samples, it cannot alone fully account for the cross—cultural differences in the thin-ideal impact. Other psychosocial factors must play a role, and future research should attempt to elucidate what these might be.

On that note, we should acknowledge that the current study is not without shortcomings. One important limitation is that participants were asked to indicate their country of residence rather than their ethnicities or heritage. While it is generally understood, as outlined in the introduction, that Turkey represents a different cultural context from more Westernised countries such as the UK, we should acknowledge that our samples in each of these countries was composed of university students. Even across different cultural contexts, universities often represent environments that are cosmopolitan and international, and therefore less of a cultural barometer of their host country. It was not therefore guaranteed that participants from our two countries were steeped in the cultural values of these respective nations. Suggestions as to the contributing role of culture, tradition and values (e.g. individualist vs collectivist) towards the current results thus remains speculation at this point. Our focus, informed by prior research, was on the specific contribution of the psychological constructs of FNE and BII to putative cross-cultural differences in the thin-ideal impact. Further studies could benefit from the collection of ethnicity data, as well as other socio-cultural factors which may mediate the influence of body image ideals (e.g., political, religious, etc.).

One notable aspect of the current study was that, to improve ecological validity, participants were allowed to control their own level of exposure to the thin-ideal images. We found that participants spent less time viewing the images if they had greater FNE, less body image flexibility or lower levels of body satisfaction. However, although participants from the UK on average had greater FNE, less body image flexibility and lower levels of body satisfaction, this did not translate to country-level differences in viewing time; UK participants spent just as much time on average looking at the images in the thin-ideal condition as those from Turkey. Thus, differences by country in terms of the impact of the intervention were not confounded by time spent viewing the images.

Indeed, although participants with greater FNE, less body image flexibility and lower body satisfaction spent less time looking at the images, they still experienced greater body dissatisfaction after viewing the images. Even minimal exposure to the thin-ideal nevertheless elicited detrimental outcomes. Thus, even though recent research suggests that thin-ideal internalisation is positively correlated with media exposure (Baceviciene & Jankauskiene, 2022), avoidance may be a poor strategy in terms of reducing the detrimental impact of the thin-ideal. With the ubiquity of idealised images on social media, in an increasingly online world, enhancing one's resilience to the impact of the thin-ideal may be a more viable approach than attempting to avoid. Given that body image flexibility was the strongest overall predictor of changes in body satisfaction, psychological interventions to improve flexibility may be a useful approach to mitigating any potential harm of thin-ideal exposure. This is encouraging, since there are already several well-established interventions for improving body image flexibility (Griffiths et al., 2018).

Despite the limitations, the current study provides a clear picture; a brief exposure to thin-ideal images, across cultures, has significant negative effects on how women feel about their bodies. While the extent of the detriment may vary across cultures, the impact is nevertheless consistently detrimental. This study also highlights the link between psychological flexibility and body satisfaction, indicating that better body image flexibility attenuates the impact of thin-ideal exposure. Future work should attempt to expand on nascent research into the protective effects of body image flexibility (e.g.

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body image flexibility.

Perey & Koenigstorfer, 2020) when exposed to idealised beauty standards that are increasingly
inescapable in the digital age.

Funding

This research did not receive any specific grant from funding agencies in the public, commercial, or
not-for-profit sectors.

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