Journal of Gender, Culture and Society
ISSN: 2754-3293
DOI: 10.32996/jgcs
Journal Homepage: www.al-kindipublisher.com/index.php/jgcs

JGCS
AL-KINDI CENTER FOR RESEARCH AND DEVELOPMENT

| RESEARCH ARTICLE

Introducing Enhanced Appearance Identity Conflict: AR Beauty Filters and Moralized Self-Presentation in Value-Laden Societies

Samiha Zouitni[1]✉and Abdelghanie Ennam[2]
[12]Department of English Studies, Faculty of Languages, Letters and Arts, Ibn Tofail University, Kenitra, Morocco
Corresponding Author: Samiha Zouitni, **E-mail**: samihazouitni@gmail.com

| ABSTRACT

The widespread use of augmented reality (AR) beauty filters has been linked to body image concerns, yet little research addresses their impact in contexts where beauty is deeply entwined with moral and cultural norms. This study introduces the enhanced appearance identity conflict (EAIC) framework to explain how AR filter use generates psychological and cultural tensions beyond appearance dissatisfaction. A survey of Moroccan social media users (N = 420) tested four hypotheses connecting perceived social pressure, identity conflict, self-comparison, filter reliance, and the emotional outcomes of guilt and perfection fatigue. Results revealed a sequential pathway: social pressure predicted identity conflict, which increased self-comparison, leading to greater filter reliance and, ultimately, heightened guilt and perfection fatigue. These findings extend existing theories of self-discrepancy and social self-comparison by demonstrating that AR filters can function as moralized self-presentation technologies in value-laden societies. EAIC provides a conceptual basis for examining how digital beauty practices intersect with cultural identity, opening new directions for cross-cultural media psychology.

| KEYWORDS

Augmented reality filters; identity conflict; cultural psychology; self-comparison; moralized self-presentation

| ARTICLE INFORMATION

ACCEPTED: 01 January 2026 **PUBLISHED:** 24 January 2026 **DOI:** 10.32996/jgcs.2026.6.1.3

1. Introduction

Social media has intensified pressures on how individuals construct and display their identities. Constant visibility fosters environments where appearance is continuously evaluated and idealized images become the standard of comparison (Festinger, 1954; Vogel et al., 2014). These dynamics reshape not only how users present themselves but also how they judge their own adequacy (Jiotsa et al., 2021). Within this context, augmented reality (AR) filters have emerged as more than playful tools: integrated into social media platforms, they embed beauty ideals into everyday communication and normalize enhanced aesthetics (Verrastro et al., 2020; Fardouly et al., 2015; Jiang & Ngien, 2020). While existing research links filters to body dissatisfaction and lower self-esteem, little is known about their impact in societies where appearance intersects with moral and cultural values. For individuals in settings shaped by religious or traditional norms that emphasize humility and naturalness, filtered beauty standards may generate psychological conflict, producing guilt, dissonance, and a sense of disconnection from the cultural self. This tension is conceptualized here as Enhanced Appearance Identity Conflict (EAIC), a pathway that extends beyond conventional social comparison frameworks.

The present study examines AR filter use through the lens of EAIC, defined as the internal tension that arises when authentic appearance, culturally informed norms, and digitally constructed ideals misalign. To capture this construct, original measures were designed from established theoretical foundations, namely, social self-comparison, self-discrepancy, and impression management (Schroeder & Behm-Morawitz, 2025; Higgins, 1987; Leary & Kowalski, 1990). The study operationalized five constructs: social pressure, social self-comparison, filter reliance, perfectionism fatigue, and filter-induced guilt. Each was

tailored to reflect both universal processes of self-perception and the culturally specific tensions of contexts where religious and traditional values regulate appearance. These measures were validated through exploratory factor analysis and internal consistency testing, ensuring their reliability for examining EAIC. By situating these constructs within a coherent theoretical framework, the study advances understanding of how technology, identity, and culture converge, highlighting the mental health implications of increasingly realistic AR beauty tools.

Literature review

1-Augmented reality filters, body image, and well-being

AR beauty filters enable instantaneous alterations to facial features such as skin tone, symmetry, and structure, allowing users to see and share an idealized version of themselves in real time (Dijkslag et al., 2024). Embedded into the infrastructure of popular social media platforms, these tools transform everyday communication and blur the boundaries between authentic and curated appearances (Scholz & Duffy, 2018). While they can serve as tools for self-expression, self-experimentation, and identity exploration (Baek et al., 2016; Huang et al., 2019), the ability to repeatedly interact with an enhanced self-image raises important concerns about their psychological effects, particularly when the filtered version becomes the primary standard of self-evaluation.

Digital augmentation of self-images, particularly through AR beauty filters, has emerged as a potent influence on body image perceptions and satisfaction levels. Exposure to manipulated or retouched photographs is consistently linked to reduced body satisfaction, especially among individuals with high social comparison tendencies (Kleemans et al., 2016; McGovern et al., 2022). AR filters intensify this effect by enabling users to compare themselves to both others' idealized appearances and a digitally perfected version of their own face, a process that reinforces the internalization of unattainable beauty standards (Mancin et al., 2023; Schroeder & Behm-Morawitz, 2024). For frequent users, AR filters often function as digital "corrective" tools, masking perceived imperfections such as skin blemishes or facial asymmetry (Dijkslag et al., 2024). Over time, repeated exposure to these alterations can shift perceptions of the actual and ideal self, increasing the perceived gap between them and deepening body dissatisfaction (Sirgy, 1982). This widening gap has also been associated with increased acceptance of cosmetic procedures and stronger intentions to pursue such interventions (Prabhu et al., 2025).

Appearance-related self-esteem, the extent of satisfaction with one's physical appearance (Gentile et al., 2009), is central to understanding the impact of AR filters on well-being. Individuals with low appearance self-esteem are more susceptible to the negative effects of idealized imagery, often experiencing heightened perceived deficiencies (Argo & Dahl, 2017; Dahl et al., 2012). In contrast, those with high appearance self-esteem may engage more playfully with AR filters, deriving enjoyment rather than harm (Scholz & Duffy, 2018). While AR filters can temporarily boost self-esteem by aligning digital images with the ideal self (Baek et al., 2016), prolonged engagement often leads to dissatisfaction when confronted with unfiltered reality (Ahadzadeh et al., 2017).

Cultural and societal norms play a pivotal role in shaping how AR beauty filters are used and perceived, influencing not only aesthetic preferences but also the acceptability of digital self-modification. In many contexts, beauty standards are embedded within shared cultural narratives, religious values, and moral expectations that dictate what is considered appropriate self-presentation (Kara & Özgür, 2022). When globalized, digitally enhanced beauty ideals circulate through social media platforms, they can disrupt or challenge these established norms, creating psychological tension for users. This tension may be heightened in societies where modesty and authenticity are central to cultural identity (Mernissi, 2003; Sadiqi, 2003), as the aspirational imagery promoted by AR filters may conflict with deeply rooted values surrounding natural appearance and self-presentation. While cultural context has been examined in body image research, few studies address AR filter use in non-Western or religiously conservative settings. This gap is important, as such contexts may uniquely intensify identity conflict and appearance-related fatigue.

Although research has extensively documented the effects of social media and image manipulation on body image and self-esteem, the unique affordances of AR filters, especially their capacity for real-time, self-directed enhancement, introduce distinct psychological dynamics. Prior work has explored social comparison and self-discrepancy in digital environments, but only limited studies address social self-comparison (Gibbons & Buunk, 1999; Seekis et al., 2020; Higgins, 1987; Schroeder & Behm-Morawitz, 2024), where individuals evaluate their unfiltered selves against digitally enhanced versions. Moreover, the interaction between AR filter use, cultural and religious appearance norms, and emerging constructs such as filter-induced guilt and perfectionism fatigue remains largely unexplored. Addressing these gaps is critical for understanding both universal and context-specific implications of AR beauty filter use.

2- Theoretical framework

Classic theories of mediated self-evaluation provide important foundations for understanding the psychological effects of AR beauty filters. Self-discrepancy theory (Higgins, 1987) explains how perceived gaps between one's actual and ideal self generate emotional strain. Social self-comparison theory (Schroeder & Behm-Morawitz, 2025) highlights the role of media-driven comparisons in shaping self-perceptions. Impression management perspectives (Leary & Kowalski, 1990) emphasize how

individuals strategically present themselves to meet social expectations. Together, these frameworks illuminate how digital self-enhancement can destabilize self-concept.

Yet these models, developed primarily in Western contexts, are limited in two key ways. First, they overlook the moral dimension of digital self-presentation that emerges in value-laden societies, where beauty practices intersect with cultural and religious norms of humility and naturalness. Second, they treat digital enhancement primarily as a source of aesthetic dissatisfaction rather than a moralized identity conflict.

To address these gaps, we propose the enhanced appearance identity conflict (EAIC) framework. EAIC integrates insights from self-discrepancy, social comparison, and impression management, but extends them by theorizing how AR filters can function as moralized self-presentation technologies. In this view, AR filters trigger not only body-related dissatisfaction but also deeper cultural and ethical tensions. EAIC predicts a sequential pathway in which social pressure heightens identity conflict, increasing social self-comparison, fostering reliance on filters, and ultimately producing emotional outcomes such as guilt and perfection fatigue. This model foregrounds the cultural specificity of digital beauty practices while offering a framework that can be tested across societies with varying moral norms.

3- Research hypotheses

Drawing on the enhanced appearance identity conflict (EAIC) framework, this study examines the sequential relationships among pressure to conform to beauty standards, social self-comparison, filter reliance, and the outcomes of filter-induced guilt and perfection fatigue. EAIC suggests that AR filter use in conservative contexts produces identity strain through three processes: internalization of culturally infused beauty ideals, comparison against digitally enhanced images, and dissonance between authentic and augmented selves. Based on this, the following hypotheses are proposed:

H1. In value-laden societies, perceived social pressure functions as a moral stressor that intensifies appearance-related identity conflict.

H2. Heightened identity conflict increases social self-comparison, defined as evaluations of one's actual self against one's digitally enhanced or filtered self (Schroeder & Behm-Morawitz, 2024).

H3. Increased social self-comparison fosters greater reliance on AR beauty filters as a compensatory strategy for managing identity conflict.

H4. Reliance on AR beauty filters produces negative emotional outcomes, specifically guilt and perfection fatigue, reflecting the moralized costs of digitally altering appearance.

Collectively, these hypotheses form the basis of the EAIC model, tested in the following sections.

Method

3- Procedure and participants

This quantitative study examined links between AR beauty filter use and psychosocial outcomes among Moroccan women (Creswell & Creswell, 2018). The final sample comprised 295 female participants recruited via in-person and online strategies to maximize demographic variability. A pilot with 30 women (varied ages) preceded data collection to refine wording, cultural appropriateness, and construct coverage; feedback informed revisions that improved clarity and relevance.

To capture cultural identity dissonance, moral conflict, and perfection-related emotional exhaustion not fully addressed by existing scales, a context-specific questionnaire was developed. Item construction drew on self-discrepancy theory, social self-comparison, and impression management (Higgins, 1987; Leary & Kowalski, 1990; Schroeder & Behm-Morawitz, 2024). Psychometric testing confirmed reliability. Four subscales demonstrated excellent internal consistency (Cronbach's $\alpha > .82$) (Nunnally & Bernstein, 1994).

The survey was administered in both English and Modern Standard Arabic, with the latter designed for participants more comfortable in their native language. Importantly, the Arabic version was not a post-hoc translation but was deployed simultaneously with the English version. Responses were later merged into a unified SPSS database following a coding and validation process to ensure cross-language consistency. The instrument was deliberately designed with sufficient scope to capture diverse psychosocial processes associated with AR beauty filter use. While the same survey has informed more than one scholarly investigation, each article isolates a distinct subset of dimensions and theoretical linkages. The present analysis addresses a separate line of inquiry from prior work, ensuring that findings are non-overlapping and contribute uniquely to the literature. This

practice follows established recommendations on the responsible use of comprehensive datasets in multi-study research (Adams, 2022).

Data collection employed both offline and online strategies. Hard copies were distributed in public spaces such as shopping malls and secondary schools to include participants with limited digital literacy or internet access, while the online version was disseminated through Facebook, Instagram, and WhatsApp to broaden reach among younger, tech-savvy groups. After collection, raw data were screened for incomplete responses, invalid entries, and inconsistencies across variables. Cleaned data were then coded and analyzed using IBM SPSS Statistics, where both descriptive and inferential analyses were performed.

The demographic profile revealed that 38.8% of participants were between 21–27 years old (n = 163), 34.0% were aged between 15-20 (n = 143), and 27.1% were in the 28–35 group (n = 114). With respect to education, 22.6% (n = 95) had not yet graduated from high school, 14.5% (n = 61) had completed high school, 15.0% (n = 63) had two years of post-secondary education, 19.0% (n = 80) had completed three years, and 28.8% (n = 121) had four or more years of higher education. Marital status showed 79.3% single, 14.0% married, 0.5% widowed, and 6.2% identified as "Other." Employment categories included 53.8% students, 22.6% employed, 9.0% non-employed, and 14.5% self-employed.

Collectively, these procedures ensured data that were both statistically robust and culturally reflective, providing a solid foundation for testing the study's hypotheses on digital beauty filter use and its psychological and cultural consequences.

4- Measures

The enhanced appearance identity conflict (EAIC)

To assess psychological and cultural dissonance related to AR beauty filter use, five original items were developed. Items targeted societal pressure, moral conflict, identity fragmentation, and value dissonance. In this study, identity conflict is conceptualized in a focused way, referring specifically to tensions between cultural–moral self-conceptions (e.g., modesty, authenticity, and religious values) and appearance-based self-conceptions (e.g., presenting one's true vs. digitally altered self). While identity is a multifaceted construct, our operationalization targets these dimensions most directly engaged by AR filter use in the Moroccan context. Additionally, responses were rated on a 5-point Likert scale (1 = Strongly Disagree, 5 = Strongly Agree).

An exploratory factor analysis supported unidimensionality for each scale, with all items loading strongly on a single factor (e.g., .611–.929), explaining between 53.37% and 83.63% of total variance across constructs. Sampling adequacy was confirmed by KMO values ranging from .799 to .905, all within the "meritorious" range, and Bartlett's tests were consistently significant (e.g., χ^2 = 1742.74, df = 10, p < .001), supporting factorability. Internal consistency was excellent across all constructs, with Cronbach's alpha coefficients ranging from .840 to .951—far exceeding the .70 threshold (Nunnally & Bernstein, 1994). Composite scores were computed by averaging the five items in each scale. Higher scores reflect greater levels of each psychological dimension (e.g., motivation for AR filter use, identity conflict, self-comparison, and reliance on digital enhancement). These validated measures ensure robust operationalization of the complex psychological effects of AR beauty filters on Moroccan women.

Social self-comparison (SSC)

Social self-comparison (SSC) was measured to capture the dissonance individuals feel when contrasting their real appearance with AR-enhanced versions. A five-item scale was developed to assess intrapersonal tension from repeated exposure to augmented filters. Responses were given on a 5-point Likert scale (1 = Strongly Disagree, 5 = Strongly Agree). A sample item is: "I feel that my filtered appearance is very different from how I look in real life, and this makes me question how I see myself."

Exploratory factor analysis confirmed unidimensionality, with KMO = .885 and Bartlett's test significant ($\chi^2(10)$ = 1480.619, p < .001. Reliability was excellent (Cronbach's α = .917) (Nunnally & Bernstein, 1994). Composite scores were calculated by averaging across items.

Filter-induced guilt

Filter-induced guilt was developed to capture the psychological discomfort of presenting an altered appearance through AR filters. Unlike general body dissatisfaction, it reflects the moral and emotional response to perceived self-deception when one's digital image departs from reality. A five-item scale was created to assess feelings of deception, anxiety, and guilt associated with filter use. A sample item reads: "I feel like I am deceiving others by using filters to enhance my looks." Responses were rated on a 5-point Likert scale (1 = Strongly Disagree, 5 = Strongly Agree).

Exploratory factor analysis confirmed unidimensionality: all items loaded significantly (.778 to .884), explaining 67.7% of variance. Sampling adequacy was supported (KMO = .811), and Bartlett's test was significant ($\chi^2(10)$ = 1230.176, p < .001) Internal

consistency was high (Cronbach's α = .879) (Nunnally & Bernstein, 1994). Composite scores were obtained by averaging across items, with higher scores indicating greater filter-induced guilt.

Filter Reliance

Filter reliance was measured through a five-item scale assessing psychological dependency on AR-based appearance enhancements, defined as distress or discomfort when presenting one's unfiltered appearance. A sample item is: "I experience anxiety about losing access to filters, as I feel my real appearance will disappoint those who see me online." Responses were given on a 5-point Likert scale (1 = Strongly Disagree, 5 = Strongly Agree).

Exploratory factor analysis confirmed unidimensionality: all items loaded significantly .865 to .905), with a single factor explaining 79.7% of variance. Sampling adequacy was excellent (KMO = .874), and Bartlett's test of sphericity was significant ($\chi^2(10) = 1666.348$, $p < .001$), supporting the appropriateness of the data for factor analysis. Internal consistency was excellent (Cronbach's α = .928) (Nunnally & Bernstein, 1994). Composite scores were obtained by averaging across items, with higher scores reflecting greater filter reliance

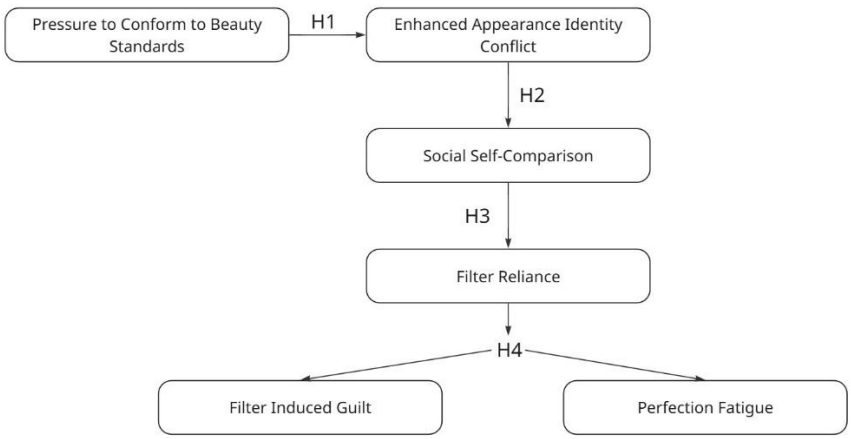
Perfection Fatigue

Perfection fatigue was developed to capture the emotional exhaustion and dissatisfaction arising from persistent efforts to meet idealized standards through AR filters. The construct reflects the cumulative strain of striving to maintain digitally enhanced beauty ideals, especially in social media contexts. Five items assessed exhaustion, dissatisfaction, emotional drain, and self-surveillance tied to filtered images. A sample item reads: "The desire to present myself perfectly on social media leaves me feeling emotionally drained or dissatisfied with my natural appearance." Responses were rated on a 5-point Likert scale (1 = Strongly Disagree, 5 = Strongly Agree).

Exploratory factor analysis supported a unidimensional structure: KMO = .827, Bartlett's $\chi^2(10) = 887.339$, $p < .001$. Loadings ranged from .758–.838, with one factor explaining 62.34% of variance. Reliability was high (Cronbach's α = .855) (Nunnally & Bernstein, 1994). Composite scores were calculated by averaging across items, with higher values indicating greater emotional exhaustion associated with filter use.

This construct offers a novel lens on the affective toll of beauty standards in the era of digital self-presentation, particularly where cultural and social expectations intersect with AR tools.

Figure 1. Conceptual model illustrating the hypothesized relationships between constructs, with each path corresponding to H1–H4.



I. RESULTS

5- Societal pressure and identity conflict

H1 predicted that social pressure would increase identity conflict, particularly in the form of cultural value conflict and feelings of disconnection from one's authentic or cultural self. To test this, both correlation and regression analyses were conducted with data from 420 participants.

A Pearson correlation analysis revealed that perceived social pressure was significantly and positively associated with both cultural value conflict ($r = .568$, $p < .001$) and identity disconnection ($r = .548$, $p < .001$). In addition, cultural value conflict and identity disconnection were themselves correlated (r = .456, p < .001), supporting the internal consistency of the identity

conflict construct. These findings indicate that as social pressure increases, individuals are more likely to feel caught between cultural expectations and modern beauty ideals, leading to heightened self-disconnection.

To further assess predictive effects, a multiple linear regression was conducted with identity disconnection as the dependent variable and two predictors: appearance-based cultural pressure and cultural value conflict. The model was statistically significant, $F(2, 417) = 107.62$, $p < .001$, and explained 34.0% of the variance in identity disconnection ($R^2 = .340$, Adjusted $R^2 = .337$). Both predictors contributed uniquely to the model: cultural value conflict ($\beta = .243$, $p < .001$) and appearance-based cultural pressure ($\beta = .411$, $p < .001$). This indicates that individuals who feel torn between cultural values and beauty standards, and especially those perceiving strong cultural pressure to conform to societal expectations, are significantly more likely to feel disconnected from their authentic or cultural selves when using AR filters. These results support H1 and align with the EAIC framework, reinforcing that internalized beauty norms and cultural dissonance are critical drivers of identity conflict among Moroccan women.

6- Identity conflict and social self-comparison

H2 predicted that identity conflict would increase social self-comparison. To examine this relationship, a Pearson correlation analysis was conducted between the composite scores of two constructs: identity conflict (operationalized as "Value_Conflict_Score") and social self-comparison (measured as "Social_Self_Comparison").

Identity conflict was derived from participant responses to multiple items that reflected inner conflict between traditional cultural values and the beauty ideals promoted by AR filters. Social self-comparison was measured through statements assessing the extent to which participants compare their appearance with their filtered self, including perceived standards of beauty on social platforms.

The analysis revealed a statistically significant and positive correlation between identity conflict and social self-comparison, with a Pearson correlation coefficient of $r = .617$ ($p < .001$). This result indicates a moderate to strong association between the two variables. This finding confirms H2 and aligns with the EAIC framework: women who experience conflict between cultural values and filtered beauty ideals are more likely to compare their actual appearance with their filtered self, intensifying internal dissonance.

7- Social self-comparison and filter reliance

H3 predicted that social self-comparison would increase reliance on AR beauty filters. A simple linear regression with social self-comparison as the predictor and filter reliance as the outcome confirmed this relationship.

The model was statistically significant, $F(1, 418) = 318.66$, $p < .001$, explaining 43.3% of the variance in filter reliance ($R^2 = .433$, Adjusted $R^2 = .431$). Social self-comparison emerged as a strong predictor of filter reliance ($\beta = .658$, $p < .001$). The unstandardized coefficient ($B = 0.614$) indicated that for every one-point increase in social self-comparison, reliance on AR filters increased by 0.614 units.

These results support H3 and the EAIC model, showing that frequent comparison between one's actual and filtered self fosters greater dependence on AR filters as a strategy for managing appearance.

Figure 2. Relationship Between Social Self-Comparison and Behavioral Reliance on AR Beauty Filters

8- Filter reliance as a predictor of guilt and appearance-related fatigue

Hypothesis 4 (H4) proposed that greater reliance on AR beauty filters would be positively associated with both filter-induced guilt and appearance-related fatigue. To test this, two linear regressions were conducted with filter reliance as the predictor.

Filter reliance significantly predicted guilt, $\beta = .620$, $p < .001$, $R^2 = .385$. The unstandardized coefficient $B = 0.607$ indicated that for every one-point increase in filter reliance, guilt increased by 0.607 units.

The second regression also revealed that filter reliance significantly predicted perfection fatigue, $\beta = 728$, $p < .001$, $R^2 = .529$. This very strong effect suggests that greater reliance on filters is associated with higher vulnerability to psychological exhaustion from digital perfectionism.

These findings provide strong support for H4, demonstrating that filter reliance not only correlates with but also predicts key negative outcomes, namely, guilt and fatigue, underscoring the emotional costs of habitual filter use.

Discussion

Guided by the enhanced appearance identity conflict (EAIC) framework, this study shows that AR beauty filters generate psychological strain in societies where appearance is tied to tradition, religion, and cultural identity. The results revealed a sequential pathway—social pressure → identity conflict → social self-comparison → filter reliance → guilt and perfection fatigue. Filters thus emerge not as neutral tools but as catalysts that destabilize self-evaluation, normalize globalized beauty norms, and challenge local value systems.

The first link, social pressure predicting identity conflict, aligns with the impression management theory (Leary & Kowalski, 1990). In Morocco, where restraint and authenticity carry moral weight, beauty is anchored in religious and cultural norms rather than framed as a matter of individual preference. Within an Islamic cultural context, modesty is central to ideals of beauty (Mernissi, 2003; Sadiqi, 2003), and appearance is often read as an outward sign of morality. Practices of excessive or artificial beautification may be viewed as departures from authenticity and self-respect (Elliott, 2015). These cultural norms intensify the strain when globalized, digitally enhanced beauty ideals promoted by AR filters clash with local expectations of natural presentation. In this setting, beautification becomes not just aesthetic but moral, positioning social pressure as a direct threat to the cultural self-concept.

This tension does not end with conflict. The results further showed that identity conflict drives self-comparison, which in turn fosters reliance on filters. This finding supports self-discrepancy theory (Higgins, 1987), as the filtered self functions as an 'ideal self' standard, widening the gap with one's unfiltered reality. In Morocco, where authenticity signals moral integrity, this comparison heightens the conflict between digital self-presentation and cultural identity. The third stage, where social self-comparison predicted filter reliance, extends impression management perspectives. Participants who compared their real and filtered appearances more frequently also expressed reliance on filters to feel confident online, often describing discomfort when posting unfiltered images. Over time, filters shift from tools of experimentation to habitual mechanisms of self-presentation, fostering dependence on digitally modified identities. In Morocco, where modest presentation is traditionally expected, such reliance represents not just psychological dependence but also a cultural negotiation between authenticity and globalized digital norms.

The results of Hypothesis 4 provide some of the clearest evidence, showing that filter reliance strongly predicts both filter-induced guilt and perfection fatigue, with guilt emerging as a distinctly value-laden response. In contexts where religious or traditional values encourage natural self-presentation, filter use can generate ethical dissonance, transforming a digital enhancement into a perceived moral transgression. The data further suggests that guilt intensifies with reliance: the more filters become habitual and necessary, the heavier the emotional toll when users confront the gap between their online persona and their offline identity. This dynamic reinforces the altered self as the standard while deepening self-reproach when that standard is recognized as inauthentic, producing a cycle of use and regret. This guilt is especially pronounced in Morocco, where established cultural ideals of reserve and sincerity heighten the sense of moral transgression.

Synthesizing the results, these findings validate EAIC as a culturally grounded model that integrates existing theories while addressing gaps in prior research. Whereas Western-centered frameworks typically frame filters as drivers of body dissatisfaction or self-esteem fluctuations, EAIC highlights how filters in Morocco generate identity conflict and moral strain, producing both emotional exhaustion and guilt. This makes EAIC not just an extension but an essential complement to existing models, showing that digital self-presentation technologies are entangled with cultural values as much as with psychological

processes. EAIC thus contributes a new dimension to media psychology by reframing digital beautification as a moral as well as psychological practice. While this study highlights its salience in Morocco, the framework provides a foundation for examining how AR filters intersect with cultural values across diverse societies.

9- Theoretical implications

The present study advances theory by reframing AR beauty filters as moral technologies rather than simple aesthetic tools. Existing frameworks, for instance, self-discrepancy theory (Higgins, 1987), social self-comparison theory (Schroeder & Behm-Morawitz, 2025), and impression management (Leary & Kowalski, 1990), have illuminated how individuals evaluate themselves and manage their self-presentation. Yet, these models generally treat appearance as a private or psychological concern. EAIC adds an essential dimension by showing how digitally enhanced self-presentation acquires ethical meaning in contexts where appearance is socially regulated and intertwined with cultural identity. Conflict, reliance, and guilt thus cannot be understood solely as intrapsychic responses, but as processes embedded within broader systems of value and morality.

This contribution is visible in three ways. First, EAIC extends self-discrepancy theory by specifying that the filtered self functions as both an ideal benchmark and a morally charged one. Conflict, therefore, reflects not only the gap between the actual and augmented self, but also between the actual and the culturally sanctioned self. Second, EAIC develops social comparison theory by incorporating the construct of social self-comparison introduced by Schroeder and Behm-Morawitz (2024). Their work identified how individuals evaluate themselves against their own digitally enhanced images; this study extends the construct by testing its effects in a moralized cultural context, where such comparisons intensify identity conflict because they simultaneously undermine appearance satisfaction and moral authenticity. Finally, EAIC enriches impression management theory by clarifying how strategic presentation can evolve into habitual reliance. Reliance on filters is not merely tactical but reflects a perceived obligation to maintain an image that aligns with both globalized beauty norms and local expectations.

Although the survey tested only the maladaptive pathway, namely, conflict leading to reliance and culminating in guilt and perfection fatigue, the framework also raises the possibility of an alternative resolution. Qualitative observations from the broader project suggest that some individuals respond to conflict by rejecting filters altogether, framing disengagement as a way to preserve authenticity and moral integrity. This pathway has not been formally tested and should not be taken as established evidence. Nevertheless, it points to a potentially important extension of EAIC: conflict may lead either to dependence or to resistance, depending on the salience of cultural commitments. Future research should examine this possibility systematically, as identifying conditions under which disengagement occurs would further specify the model's boundary conditions.

By integrating these theoretical extensions, EAIC provides a platform for advancing research on digital self-presentation. It directs attention to filtered self-comparison as a construct distinct from traditional comparison, to reliance as a psychological dependence rather than mere frequency of use, and to guilt as a morally saturated emotion rather than a generic negative affect. Equally important, it underscores that these processes are not culturally neutral. In Morocco, filters provoked guilt because they violated modesty and authenticity norms, but in more secular or individualist contexts the same technologies may carry different meanings. The implication is that EAIC can serve as a culturally adaptive framework, sensitive to the way values shape the psychological consequences of digital beautification. By embedding moral meaning into established theories of self-evaluation and self-presentation, EAIC contributes a new dimension to media psychology and opens a research agenda that crosses cultural boundaries.

10- Limitations

Although this study advances theoretical and empirical understanding of AR beauty filter use in culturally value-laden contexts, certain limitations should be noted. First, reliance on self-report data introduces the possibility of social desirability bias, particularly given the moral and cultural sensitivities surrounding beauty practices in Morocco. Second, the cross-sectional survey design limits causal inference; longitudinal or experimental approaches could clarify temporal dynamics and directionality within the proposed pathway. Third, while the EAIC framework was operationalized through context-sensitive measures, survey length and item complexity may have introduced response fatigue, suggesting that streamlined or adaptive designs could strengthen future work. Finally, the sample, though diverse in age and educational background, was restricted to Moroccan women; future research should test the framework across genders and cultural settings to assess its broader applicability.

Conclusion

This study has shown that AR beauty filters operate within moral and cultural frameworks, not just psychological ones. The enhanced appearance identity conflict (EAIC) model advances theory by highlighting how digital beautification can destabilize identity in societies where authenticity carries ethical weight. Beyond its Moroccan context, the framework opens new lines of inquiry into how cultural norms shape the psychological outcomes of digital self-presentation. By foregrounding the moral dimension of beautification, EAIC moves media psychology beyond body dissatisfaction models toward an understanding of filters

as cultural technologies that structure authenticity, identity, and value negotiation in an increasingly globalized digital environment.

Acknowledgements

The authors thank the survey participants for their valuable contributions to this research.

Author Contributions

- **Samiha Zouitni**: Conceptualization– Data curation– Formal analysis– Funding acquisition, Investigation– Methodology– Project administration– Resources– Software– Visualization–Writing – original draft– Writing – review & editing
- **Abdelghanie Ennam**: Supervision and validation.

Statements and Declarations

Ethical Approval

The study was conducted as part of the author's doctoral research project, which is formally registered with Ibn Tofail University. At the time of data collection, the faculty did not operate a dedicated institutional review board for non-clinical social science research. Instead, doctoral projects are formally registered through faculty attestation, which confirms their legitimacy and authorization to proceed. Informed consent was obtained verbally from all participants, who were assured of anonymity, confidentiality, and the right to withdraw at any time. The study was conducted in accordance with the principles of the Declaration of Helsinki.

Consent to Participate

Participation in this study was voluntary and anonymous. By completing the survey, participants provided verbal informed consent. No identifying personal information (e.g., names, emails) was collected. At the time of data collection, Ibn Tofail did not require institutional ethics board review for minimal-risk, non-clinical survey research. The study was formally registered as part of the author's doctoral research through faculty attestation.

Consent for Publication

Not applicable.

Declaration of Conflicting Interests

The authors declare no conflicts of interest. The dataset used in this study has also been analyzed in separate manuscripts addressing different constructs. There is no overlap in research questions, hypotheses, or reported findings.

Funding

This research was partially supported by a doctoral grant from Ibn Tofail University, which funded the early stages of the project.

Data Availability

The anonymized survey data that support the findings of this study are available from the corresponding author upon reasonable request. The dataset is not publicly available due to ethical and cultural considerations, but all identifying information was excluded at the time of collection.

References

[1]. Adams, N. N. (2022). Salami Slicing: clarifying common misconceptions for social science early-career researchers. *SN Social Sciences*, *2*(7). https://doi.org/10.1007/s43545-022-00389-6

[2]. Ahadzadeh, A. S., Pahlevan Sharif, S., & Ong, F. S. (2017). Self-schema and self-discrepancy mediate the influence of Instagram usage on body image satisfaction among youth. *Telematics and Informatics, 34*(8), 1544–1554. https://psycnet.apa.org/doi/10.1016/j.chb.2016.11.011

[3]. Argo, J. J., & Dahl, D. W. (2017). Standards of Beauty: The impact of Mannequins in the retail context. *Journal of Consumer Research*, *44*(5), 974–990. https://doi.org/10.1093/jcr/ucx072

[4]. Baek, T. H., Yoo, C. Y., & Yoon, S. (2016). Augment yourself through virtual mirror: the impact of self-viewing and narcissism on consumer responses. *International Journal of Advertising*, *37*(3), 421–439. https://doi.org/10.1080/02650487.2016.1244887

[5]. Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). SAGE.

[6]. Dahl, D. W., Argo, J. J., & Morales, A. C. (2012). Social information in the retail environment: the importance of consumption alignment, referent identity, and Self-Esteem. *Journal of Consumer Research*, *38*(5), 860–871. https://doi.org/10.1086/660918

[7]. Dijkslag, I., Santos, L. B., Irene, G., & Ketelaar, P. (2024). To beautify or uglify! The effects of augmented reality face filters on body satisfaction moderated by self-esteem and self-identification. *Computers in Human Behavior*, *159*, 108343. https://doi.org/10.1016/j.chb.2024.108343

[8]. Fardouly, J., Diedrichs, P. C., Vartanian, L. R., & Halliwell, E. (2015). Social comparisons on social media: The impact of Facebook on young women's body image concerns and mood. *Body Image*, *13*, 38–45. https://doi.org/10.1016/j.bodyim.2014.12.002

[9]. Festinger, L. (1954). A theory of social comparison processes. *Human Relations*, *7*(2), 117–140. https://doi.org/10.1177/001872675400700202

[10]. Gentile, B., Grabe, S., Dolan-Pascoe, B., Twenge, J. M., Wells, B. E., & Maitino, A. (2009). Gender Differences in Domain-Specific Self-Esteem: A Meta-Analysis. *Review of General Psychology*, *13*(1), 34–45. https://doi.org/10.1037/a0013689

[11]. Gibbons, F. X., & Buunk, B. P. (1999). Individual differences in social comparison: Development of a scale of social comparison orientation. *Journal of Personality and Social Psychology*, *76*(1), 129–142. https://doi.org/10.1037/0022-3514.76.1.129

[12]. Higgins, E. T. (1987). Self-discrepancy: A theory relating self and affect. *Psychological Review*, *94*(3), 319–340. https://doi.org/10.1037/0033-295x.94.3.319

[13]. Huang, T., Mathews, S., & Chou, C. Y. (2019). Enhancing online rapport experience via augmented reality. *Journal of Services Marketing*, *33*(7), 851–865. https://doi.org/10.1108/jsm-12-2018-0366

[14]. Jiang, S., & Ngien, A. (2020). The effects of Instagram use, social comparison, and Self-Esteem on social anxiety: a survey study in Singapore. *Social Media + Society*, *6*(2). https://doi.org/10.1177/2056305120912488

[15]. Jiotsa, B., Naccache, B., Duval, M., Rocher, B., & Grall-Bronnec, M. (2021). Social Media Use and Body Image Disorders: Association between Frequency of Comparing One's Own Physical Appearance to That of People Being Followed on Social Media and Body Dissatisfaction and Drive for Thinness. *International Journal of Environmental Research and Public Health*, *18*(6), 2880. https://doi.org/10.3390/ijerph18062880

[16]. Kara, M., & Özgür, F. F. (2022). Perception of beauty in different cultures. In Elsevier eBooks (pp. 11–19). https://doi.org/10.1016/b978-0-323-98804-9.00018-9

[17]. Kleemans, M., Daalmans, S., Carbaat, I., & Anschütz, D. (2016). Picture Perfect: The direct effect of manipulated Instagram photos on body image in adolescent girls. *Media Psychology*, *21*(1), 93–110. https://doi.org/10.1080/15213269.2016.1257392

[18]. 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

[19]. Mancin, P., Cerea, S., Bottesi, G., & Ghisi, M. (2023). Instagram use and negative and positive body image: the relationship with following accounts and content and filter use among female students. *Current Psychology*, *43*(12), 10669–10681. https://doi.org/10.1007/s12144-023-05204-w

[20]. McGovern, O., Collins, R., & Dunne, S. (2022). The associations between photo-editing and body concerns among females: A systematic review. *Body Image*, *43*, 504–517. https://doi.org/10.1016/j.bodyim.2022.10.013

[21]. Mernissi, F. (2003). *Beyond the veil: Male-female dynamics in a modern Muslim society* (Rev. ed.). Indiana University Press.

[22]. Nunnally, J. C., & Bernstein, I. H. (1994). *Psychometric theory* (3rd ed.). McGraw-Hill.

[23]. Prabhu, S., Khetpal, S., Jain, N. S., & Vardanian, A. J. (2025). The influence of social media on patient expectations in plastic surgery. *Clinics in Plastic Surgery*, *52*(3), 363–367. https://doi.org/10.1016/j.cps.2025.03.002

[24]. Sadiqi, F. (2003). *Women, gender, and language in Morocco*. Brill. https://doi.org/10.1163/9789047404378

[25]. Scholz, J., & Duffy, K. (2018). We ARe at home: How augmented reality reshapes mobile marketing and consumer-brand relationships. *Journal of Retailing and Consumer Services*, *44*, 11–23. https://doi.org/10.1016/j.jretconser.2018.05.004

[26]. Schroeder, M., & Behm-Morawitz, E. (2024). Digitally curated beauty: The impact of slimming beauty filters on body image, weight loss desire, self-objectification, and anti-fat attitudes. *Computers in Human Behavior*, 108519. https://doi.org/10.1016/j.chb.2024.108519

[27]. Seekis, V., Bradley, G. L., & Duffy, A. L. (2020). Appearance-Related social networking sites and body image in young women: Testing an Objectification-Social Comparison model. *Psychology of Women Quarterly*, *44*(3), 377–392. https://doi.org/10.1177/0361684320920826

[28]. Sirgy, M. J. (1982). Self-Concept in Consumer Behavior: A Critical review. *Journal of Consumer Research*, *9*(3), 287. https://doi.org/10.1086/208924

[29]. Verrastro, V., Fontanesi, L., Liga, F., Cuzzocrea, F., & Gugliandolo, M. C. (2020). Fear the Instagram: beauty stereotypes, body image and Instagram use in a sample of male and female adolescents. *Qwerty*, *15*(1). https://doi.org/10.30557/qw000021

[30]. Vogel, E. A., Rose, J. P., Roberts, L. R., & Eckles, K. (2014). Social comparison, social media, and self-esteem. *Psychology of Popular Media Culture*, *3*(4), 206–222. https://doi.org/10.1037/ppm0000047

[31]. Elliott, A. (2015). *Identity troubles: An introduction*. Routledge. https://doi.org/10.4324/9780203402221