

Behind the Digital Mirror: Motives and Body Image Consequences of AR Beauty Filter Use in Morocco

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Abstract

Augmented reality (AR) beauty filters are increasingly used in online self-presentation, raising concerns about their impact on body image and well-being. Existing research has focused largely on Western contexts, leaving little evidence from North Africa. This study examined motives for AR filter use and their associations with self-perception and psychological distress among Moroccan women. An online survey was conducted with 295 participants. Measures

included frequency of social media and AR filter use, motives for filter use, self-perception outcomes (body dissatisfaction, self-esteem, anxiety about unfiltered appearance, cosmetic surgery interest, and avoidance behaviors), and psychological distress. Results showed that appearance, validation/mood, and exploration motives were endorsed at comparable levels. Frequent filter use significantly predicted higher self-perception concerns, including dissatisfaction with natural appearance, lower self-esteem, and avoidance behaviors. Filter use did not significantly predict psychological distress, though some respondents reported feelings of exhaustion or harmful self-perceptions. These findings highlight culturally specific patterns of AR filter use and emphasize the need for interventions promoting media literacy in Morocco.

Keywords: Augmented Reality Filters, Social Media, Self-Perception, Body Image, Morocco

1- Introduction

Human interaction with digital self-representation has changed substantially with the rise of augmented reality (AR) beauty filters, which allow users to subtly or dramatically alter their appearance in photos or social media posts. Studies show that individuals often use AR filters for appearance enhancement, social validation, and self-exploration motivations (Javornik et al., 2021; Szambolics, 2023). For example, users of beautifying filters report lower body satisfaction and increased self-objectification compared to non-users, while other research shows filter use is linked to greater anxiety about one's unedited appearance (Ozimek et al., 2023; Lo Destro, 2024).

Despite growing research globally, little is known about how these dynamics operate in Moroccan society. Beauty standards in Morocco are shaped by local traditions and global media, often in tension with religious values that emphasize modesty and restraint. Social media use among Moroccan youth is widespread, yet there is no published study that specifically examines motives for AR filter use, self-perception (including body dissatisfaction and self-esteem), and psychological distress in this cultural context.

1-1 Reasearch Questions

This study aims to fill that gap by asking three research questions:

1. What are the primary motives behind AR filter use among Moroccan women, and how frequently and in what contexts are these filters used?
2. How does AR filter use relate to self-perception, particularly body dissatisfaction, self-esteem, and anxiety about one's unfiltered appearance?
3. Is AR filter use associated with psychological distress in the Moroccan context?

2- Literature Review

The rapid normalization of augmented reality (AR) beauty filters has generated pressing questions about how these technologies reshape women's self-presentation and body image in different cultural contexts. While filters are often marketed as playful tools of enhancement, their pervasive use intersects with deeper psychological processes related to self-perception, comparison, and identity. Recent work highlights how women adopt filters not only for entertainment but also to satisfy motives linked to self-presentation and social approval, thereby connecting individual behavior to broader social norms (Javornik, 2016; Leary & Kowalski, 1990). In Morocco, where cultural traditions and social dynamics intersect with rapidly globalizing digital practices, the motives and effects of filter use demand close scholarly attention, particularly because the country represents a non-Western context that has been largely overlooked in body image research.

Motives for using AR filters are often explained through uses and gratifications theory, which posits that individuals actively seek media technologies to fulfill specific psychological needs. Across studies, women report using filters to enhance appearance, manage impressions, gain social validation, and sometimes to experiment with identity in ways less permissible offline (Javornik et al., 2021). Such motives are consistent with broader patterns of impression management observed in digital environments (Leary & Kowalski, 1990), with consumer

research showing that visual self-enhancement tools invite a stronger alignment between one's self-presentation and aspirational ideals (Dahl et al., 2012), and with recent empirical findings in Ghana showing that among university students, frequent beauty filter usage is strongly tied to social approval and self-enhancement motives (Anani et al., 2024).

The frequency of filter use, however, is not a neutral habit. Frequent reliance has been linked to heightened audience awareness and continuous monitoring of one's online appearance, which can amplify psychological strain (Mancin et al., 2023). Cross-cultural evidence demonstrates that even brief exposure to manipulated or idealized images on platforms like Instagram increases dissatisfaction with one's appearance, particularly among adolescent and young adult women (Kleemans et al., 2016; Tiggemann & Anderberg, 2019). In turn, repeated exposure encourages women to internalize digital beauty standards, making filters feel indispensable for everyday self-presentation (Wang et al., 2022)

The link between filter use and body image has been interpreted through multiple theoretical perspectives. Social comparison theory (Festinger, 1954) offers a foundational explanation: women compare their natural appearance with the digitally enhanced versions of themselves and with others' filtered images, often leading to upward comparisons that generate dissatisfaction (Fardouly et al., 2018; Vogel et al., 2014). The development of a social comparison orientation scale (Gibbons & Buunk, 1999) further underscores how individual differences magnify vulnerability to these effects. Relatedly, self-discrepancy theory (Higgins, 1987) posits that gaps between the actual self and ideal or ought selves predict negative affect. Applied to digital beauty, this means filters intensify the discrepancy between one's unfiltered appearance and the aspirational, edited image that circulates online (Ahadzadeh et al., 2017). Such discrepancies can foster both dissatisfaction and anxiety, creating a feedback loop that reinforces reliance on filters.

While traditional social comparison theory (Festinger, 1954) emphasizes evaluations against external referents, AR filters also introduce what may be termed social self-comparison, whereby individuals compare their unfiltered appearance with their own digitally enhanced self. This process differs from classic upward comparisons with peers or celebrities, as the reference point becomes an internally generated but technologically altered version of the self. Recent research shows that many young women report dissatisfaction when confronted with the contrast between their natural and filtered images. The filtered version is often described as closer to their “ideal” self, while the unfiltered appearance feels inadequate by comparison (Schroeder & Behm-Morawitz, 2024). In this sense, the filtered self functions as both familiar and unattainable, a paradoxical standard that is constantly accessible in everyday digital interactions.

The implications for body image are considerable. The filtered self reinforces self-discrepancy (Higgins, 1987), as prior studies demonstrate that gaps between actual and ideal selves predict body dissatisfaction and negative affect (Ahadzadeh et al., 2017). Filters exacerbate this discrepancy by offering a perfected but artificial self-image that becomes the benchmark for self-evaluation. Moreover, social self-comparison aligns with objectification processes, since digital modifications encourage self-surveillance and the adoption of an imagined audience’s gaze (Fredrickson & Roberts, 1997; Moradi & Huang, 2008). In this light, AR filters do not merely decorate images; they restructure how women view themselves, positioning the body as an object for continuous monitoring and evaluation. This dynamic resonates with evidence that visual platforms such as Instagram promote heightened self-surveillance and the tendency to equate social worth with curated appearance (Jiotsa et al., 2021).

Taken together, these literatures show that motives for filter use are not isolated from outcomes: frequency of use, driven largely by self-presentation motives, links directly to body

dissatisfaction through the mechanisms of comparison, discrepancy, and objectification. Yet most existing research has focused on Western contexts or generalized samples, leaving underexplored how cultural and moral frameworks mediate these dynamics. In societies such as Morocco, where women's identities are negotiated at the crossroads of tradition, religion, and modernity, understanding motives and outcomes of AR filter use requires situating them within local expectations about beauty, identity, and morality (Sadiqi, 2003). This study addresses that gap by examining not only how frequently Moroccan women use AR beauty filters, but also the motives that drive this use and the consequences for their body image.

3- Theoretical Framework

This study integrates five complementary frameworks to explain the motives behind AR beauty filter use and their effects on body image among Moroccan women. Goffman's (1956) dramaturgical theory of self-presentation conceptualizes social interaction as performance, where individuals present idealized versions of themselves on a metaphorical stage. In digital contexts, AR filters can be seen as props in this performance, enabling users, particularly, women navigating social constraints, to experiment with aspirational or alternative identities.

Uses and gratifications theory provides the foundation for understanding why women engage with AR filters. This theory frames media use as an active process driven by personal and social needs, such as appearance enhancement, mood regulation, and identity exploration (Javornik, 2016). In this context, AR filters serve as digital tools through which Moroccan women seek social validation, aesthetic alignment, or playful experimentation.

The consequences of frequent filter use can be understood through social comparison theory (Festinger, 1954), which explains how women evaluate themselves against the appearances of others online. Recent extensions introduce the idea of social self-comparison, in which individuals compare their natural appearance with their own digitally enhanced self

(Schroeder & Behm-Morawitz, 2024). This internal comparison intensifies self-evaluation processes beyond traditional upward comparison with others.

Finally, self-discrepancy theory (Higgins, 1987) explains the emotional impact of these comparisons. The filtered self often embodies an idealized version of one's appearance, accentuating the gap between the actual and ideal self. Larger discrepancies between how women look offline and how they present themselves online can lead to dissatisfaction, appearance-related anxiety, and reduced self-esteem (Ahadzadeh et al., 2017). Together, these three frameworks, self-presentation, social comparison (and its internal variant), and self-discrepancy, offer an integrated lens for interpreting the interplay between AR filter use, self-presentation, and psychosocial outcomes in the Moroccan context.

4- Methodology

4-1 Research Design

This study adopted a quantitative, cross-sectional survey design, which is suitable for exploring naturally occurring relationships among psychological and behavioral variables without experimental manipulation (Creswell & Creswell, 2018). Data were collected using a structured questionnaire distributed through both online and offline channels to maximize inclusiveness. A non-probability sampling strategy combining convenience and snowball sampling was employed. Participants were recruited through online networks where initial respondents were encouraged to share the survey link, as well as through offline distribution in schools, community centers, and shopping malls.

To ensure accessibility for participants with different educational and linguistic backgrounds, the questionnaire was translated into Modern Standard Arabic and carefully reviewed by subject matter experts in communication and linguistics to ensure accuracy, clarity, and cultural appropriateness. The final instrument has been employed in two related studies.

For the present article, analyses focus on 13 sections covering frequency of AR filter use, motives for use, self-perception outcomes, and indicators of psychological distress.

The study sample consisted of 295 Moroccan women between the ages of 15 and 35. Participation was voluntary and anonymous, with respondents providing informed consent prior to completing the survey.

4-2 Instrument

The analysis drew on 13 items divided into three sections: demographics, social media use and motives, and the psychological impact of AR beauty filter use.

The demographic section contained four categorical items measuring age group, educational level, marital status, and employment status.

The social media use and motives section included three items capturing frequency of social media engagement and AR filter use, as well as the preferred social media platform. In addition, a five-item Likert-type scale was used to assess motives for AR filter use, covering domains such as conformity to societal beauty expectations, enhancement of attractiveness, validation through social feedback, mood regulation, and identity exploration. Responses were measured on a five-point scale ranging from 1 (strongly disagree) to 5 (strongly agree), with higher scores reflecting stronger motivational endorsement.

The impact section examined outcomes related to self-perception and mental health. Two items assessed satisfaction with one's natural appearance and satisfaction with one's filtered appearance, respectively. A five-item scale was developed to measure self-perception outcomes, including anxiety about unfiltered appearance, perceived attractiveness deficits, cosmetic surgery interest, body dissatisfaction, and avoidance of self-presentation online. Finally, a five-item scale captured mental health outcomes, addressing emotional exhaustion, depressive affect, body-image-related strain, harmful self-referential thoughts, and distress

linked to the gap between filtered and unfiltered selves. Both scales employed five-point Likert response formats (1 = strongly disagree, 5 = strongly agree).

The instrument was designed to provide a multidimensional assessment of AR beauty filter use, spanning demographic correlates, usage frequency, motivational drivers, self-perception, and psychological well-being.

4-3 Reliability and Validity of the Survey Scales

4-3-1 Motives for AR Filter Use

The five-item motives scale demonstrated high internal consistency (Cronbach's $\alpha = .849$). Sampling adequacy was confirmed (KMO = .836), and Bartlett's test of sphericity was significant ($\chi^2(10) = 598.680, p < .001$). Exploratory factor analysis supported a single-factor solution explaining 53.69% of the variance.

4-3-2 Impact on Self-Perception

The self-perception scale (five items) showed good reliability (Cronbach's $\alpha = .826$). Factorability was supported by KMO = .801 and a significant Bartlett's test ($\chi^2(10) = 522.773, p < .001$). EFA indicated a unidimensional structure with variance explained exceeding 49%.

4-3-3 Impact on Mental Health

The mental health scale (five items) demonstrated strong internal consistency (Cronbach's $\alpha = .832$). Sampling adequacy was confirmed (KMO = .803), and Bartlett's test was significant ($\chi^2(10) = 554.639, p < .001$). EFA revealed a single-factor solution accounting for more than 50% of the variance.

Table 1. Reliability of the Survey Scales

Scale	Items	Cronbach's α
Motives for AR Filter Use	5	.849
Self-Perception Impact	5	.826
Mental Health Impact	5	.832

Note. Cronbach's α values above .70 indicate acceptable internal consistency (Nunnally & Bernstein, 1994).

Collectively, the psychometric results confirm that the three scales used in this study are both reliable and valid. Cronbach's α values exceeded the recommended threshold of .70 (Nunnally & Bernstein, 1994), indicating strong internal consistency across items. The KMO values, all above .80, and highly significant Bartlett's tests confirmed that the data were suitable for factor analysis. The single-factor solutions and variance explained by each scale further support their unidimensionality, suggesting that the items within each scale coherently measure the intended constructs. These findings justify the use of the motives, self-perception, and mental health scales as robust measures in the present analysis.

4-3-4 Participants

The majority of participants were young, single women with varied educational and employment backgrounds, reflecting a diverse cross-section of Moroccan females aged 15 to 35.

Table 2: Descriptive Demographic Statistics of Survey Participants (n = 295)

Demographic Variable	Category	Frequency (n)	Valid Percent (%)
Age Group	15–20	106	35.9%
	21–27	108	36.6%
	28–35	81	27.5%
Educational Level	Haven't graduated high school yet	78	26.4%
	High School Graduates	40	13.6%
	2 Years After High School	46	15.6%
	3 Years After High School	44	14.9%

	4+ Years After High School	87	29.5%
Marital Status	Single	229	77.6%
	Married	44	14.9%
	Widowed	2	0.7%
	Other	20	6.8%
Employment Status	Student	167	56.6%
	Employed	66	22.4%
	Non-employed	23	7.8%
	Self-employed	16	5.4%
	Other	23	7.8%

5- Results

The results are presented in line with the research questions, beginning with patterns of social media and AR beauty filter use, followed by their associations with self-perception, and finally their relation to mental health outcomes.

5-1 Frequency of Social Media and AR Filter Use

The vast majority of participants reported frequent engagement with social media platforms. 73.9% of respondents indicated that they use social media every day, while an additional 11.2% reported use on 4 to 6 days per week. Only a small minority reported less frequent use, with 7.1% using social media 2 to 3 days per week, 7.1% using it rarely, and less than 1% reporting that they never use it. These findings suggest that daily engagement with social media is normative among Moroccan women in the sample.

When asked about their most frequently used platform, a substantial majority of participants identified Instagram (68.8%) as their primary platform. TikTok was the second most common choice (17.3%), followed by Other platforms (10.8%), and Snapchat (3.1%). The dominance of Instagram in this sample highlights its central role in participants' digital

lives and may also help explain the prominence of AR filter use, given Instagram's extensive integration of beauty-enhancing filters.

Table 3. Most Frequently Used Social Media Platforms (N = 295)

Platform	<i>n</i>	%
Instagram	203	68.8
TikTok	51	17.3
Snapchat	9	3.1
Other	32	10.8

In terms of AR beauty filter use, responses were more evenly distributed. Approximately one quarter of participants reported using filters sometimes (25.4%), while 27.5% reported rare use. About one in five participants reported using filters usually (19.3%), and 8.8% reported always using them. Notably, 19.0% indicated that they never use AR filters. Taken together, these findings indicate that although social media engagement is nearly universal among participants, the use of AR beauty filters is more variable, with roughly half of the sample (53.5%) using them at least sometimes.

5-2 Motives for AR Filter Use

To address the first research question regarding the primary motives for AR beauty filter use, three composite motive categories were created: appearance-related motives, validation/mood motives, and exploration motives. Table 4 presents the descriptive statistics for each category.

Participants reported relatively modest endorsement of all three motive types. Exploration motives received the highest mean score ($M = 2.66$, $SD = 1.29$), followed by validation/mood motives ($M = 2.58$, $SD = 1.13$) and appearance motives ($M = 2.54$, $SD = 1.06$).

A Friedman test was conducted to examine whether these observed differences in endorsement were statistically significant. Results indicated no significant differences across

the three motive categories, $\chi^2(2) = 1.26, p = .534$. This finding suggests that Moroccan women in the sample endorsed appearance, validation/mood, and exploration motives at comparable levels, with no single category emerging as significantly more dominant than the others.

Table 4. Descriptive Statistics for AR Beauty Filter Use Motives (N = 295)

Motive Category	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Appearance motives	2.54	1.06	1.00	5.00
Validation/Mood motives	2.58	1.13	1.00	5.00
Exploration motives	2.66	1.29	1.00	5.00

5-3 Effects of AR Filter Use on Self-Perception

To assess whether the frequency of AR beauty filter use predicts appearance-related anxiety and avoidance, a simple linear regression analysis was conducted. The independent variable was the self-reported frequency of AR filter use for self-presentation on social media, and the dependent variable was the self-perception score, capturing dissatisfaction with unfiltered appearance, appearance-based anxiety, and social avoidance behaviors.

The regression model was statistically significant, $F(1, 293) = 18.58, p < .001$, and explained approximately 6.0% of the variance in self-perception scores ($R^2 = .060$, Adjusted $R^2 = .056$). The unstandardized regression coefficient indicated that each one-unit increase in AR filter use frequency predicted a 0.19 increase in self-perception distress scores ($B = 0.19, SE B = 0.04, t = 4.31, p < .001$). The standardized coefficient confirmed a small-to-moderate effect ($\beta = .24$).

These findings suggest that more frequent AR filter use is significantly associated with higher appearance-related distress, including dissatisfaction with one's unfiltered appearance, heightened appearance-based anxiety, and increased tendencies toward social avoidance.

5-4 Mental Health Outcomes of AR Filter Use

To examine whether the frequency of AR beauty filter use predicts psychological distress, a simple linear regression analysis was conducted. The independent variable was the

self-reported frequency of AR filter use, and the dependent variable was the mental health impact score, capturing feelings of mental exhaustion, depressive self-perception, and harmful internal emotional states.

The regression model was not statistically significant, $F(1, 293) = 2.90, p = .090$, indicating that AR filter use frequency was not a significant predictor of psychological distress. The model accounted for only 1.0% of the variance in mental health scores ($R^2 = .010$, Adjusted $R^2 = .006$), with a standard error of the estimate of 0.894. The unstandardized regression coefficient was $B = 0.07$ ($SE B = 0.04$), with a standardized coefficient of $\beta = .10, t(293) = 1.70, p = .090$. Although the relationship was positive in direction, it did not reach statistical significance.

Although the predictive model was not significant, descriptive analysis of the individual items revealed that a proportion of participants reported meaningful distress related to AR filter use (see the appendix). The highest mean score was for feelings of mental exhaustion ($M = 2.47, SD = 1.23$), followed by depressive dissatisfaction with natural appearance ($M = 2.33, SD = 1.20$). Harmful self-worth thoughts ($M = 2.19, SD = 1.18$) and body image concerns ($M = 2.13, SD = 1.18$) were endorsed at lower but non-negligible levels. The lowest endorsement was for hopelessness or self-harm ($M = 1.64, SD = 0.99$).

These findings suggest that while AR filter use did not significantly predict overall psychological distress in the regression model, some participants nonetheless reported notable individual experiences of exhaustion, dissatisfaction, or harmful thoughts linked to their use of filters.

Table 5. Linear Regression Predicting Psychological Distress from AR Filter Use Frequency (N = 295)

Predictor	<i>B</i>	<i>SE B</i>	<i>B</i>	<i>t</i>	<i>p</i>
(Constant)	1.96	0.13	—	15.45	< .001

Filter Use Frequency	0.07	0.04	0.10	1.70	.090
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Model Summary: $R = .099$, $R^2 = .010$, Adjusted $R^2 = .006$, $SE = 0.894$

ANOVA: $F(1, 293) = 2.90$, $p = .090$

6- Discussion

This study examined AR beauty filter use among Moroccan women and its links to motives, self-perception, and psychological distress. Three main results were observed: motives for using filters were endorsed at comparable levels, with exploration slightly higher; filter use predicted appearance-based anxiety and avoidance; and filter use did not significantly predict overall psychological distress, though a portion of women reported distressing experiences. These findings provide new insights into the interplay between digital self-presentation and wellbeing in the Moroccan context, where traditional beauty norms and rapidly evolving social media cultures intersect.

The fact that Moroccan women used AR filters for appearance, validation/mood, and exploration at similar levels highlights the complexity of their digital practices. Appearance motives reflect efforts to conform to beauty ideals, such as smoother skin, lighter complexion, or sharper facial features. In Morocco, where Eurocentric beauty ideals circulate through globalized and local media, these standards shape how women perceive and evaluate their appearance, and filters provide an accessible means of aligning one's image with these expectations (Zouitni & Ennam, 2024).

Validation and mood motives represent more psychosocial gratifications: the relief of posting a photo without worrying about blemishes, or the satisfaction of receiving positive comments and likes. Many Moroccan women derive satisfaction and confidence from likes, positive comments, and maintaining a visible, curated online presence (El Idrissi Amiri & Ghourdou, 2024). In this light, filters are not simply playful tools but coping mechanisms that reduce anxiety before posting.

Exploration motives, which endorsed slightly higher, suggest that filters also enable women to play with identity. Snapchat's playful distortions or Instagram's fantasy-like filters allow women to experiment with appearances they cannot adopt offline, whether because of cost, social restrictions, or stigma. This resonates with Naegele and Goffman's (1956) self-presentation theory: online platforms offer a "stage" for trying out alternative selves. For Moroccan women, who often balance expectations of modesty with aspirations for modern self-expression, this digital space for identity play may feel particularly liberating.

The regression analysis indicated that frequent AR filter use significantly predicted higher self-perception concerns. Survey responses highlighted several domains in which filters influenced how participants viewed themselves. A substantial number agreed that filters made them feel anxious or worried about how others would perceive their unfiltered appearance, suggesting that digital enhancements foster insecurity about being seen offline. Many also reported that their natural appearance felt less attractive compared to their filtered one, pointing to a perceived gap between the "real" and "ideal" self.

Concerns about body image and self-esteem also emerged. A considerable portion of respondents endorsed feelings of body dissatisfaction and lower self-esteem after using AR filters, while others reported avoiding posting pictures or videos because they felt their unedited appearance was not good enough compared to AR-enhanced content. These findings align with Social Comparison Theory (Festinger, 1954), which emphasizes that individuals evaluate themselves against idealized standards. AR filters create an enhanced self-image that can serve as an upward comparison target, reinforcing dissatisfaction with the unfiltered self. In addition to comparing themselves to others, many women also evaluated their unfiltered appearance against their own filtered images, a process known as social self-comparison (Schroeder & Behm-Morawitz, 2024). This internal comparison can further reinforce dissatisfaction and the sense of falling short of one's idealized digital self.

Prior research similarly found that exposure to edited photos predicts body dissatisfaction and self-esteem decrements among women (Fardouly et al., 2018; Ozimek et al., 2023). Only a small minority of participants agreed that filter use had increased their interest in cosmetic surgery. While not a dominant trend in this sample, the finding resonates with studies suggesting that filter use can, for some, increase openness to surgical modification of appearance (Walker et al., 2019). This suggests that although most Moroccan women did not endorse such outcomes, filters may still contribute to reshaping expectations about what is considered an attainable or desirable appearance.

In the Moroccan context, where beauty and appearance remain socially salient, these patterns underscore how AR filters can amplify self-surveillance and pressure to conform to idealized aesthetics. The results demonstrate that filter use is associated not only with dissatisfaction and self-esteem issues but also with anxiety about being evaluated without digital enhancement. Although these patterns echo findings from other settings, the Moroccan context presents distinct social dynamics that may heighten the impact of AR filter use on self-perception (Szabolics et al., 2023).

While filter use did not significantly predict overall psychological distress, descriptive data revealed that some women reported exhaustion, dissatisfaction, and even harmful thoughts. This nuance is important: at the group level, AR filters may not produce uniform mental health effects, but for vulnerable subgroups, the consequences can be serious. Self-Discrepancy Theory (Higgins, 1987) helps explain this: the larger the gap between a woman's filtered self and her offline reality, the more likely she is to feel disheartened or hopeless. In Morocco, where traditional family and social settings continue to value beauty as symbolic capital (Hamelin et al., 2018), the tension between curated online selves and unfiltered daily selves can intensify this gap. For some participants, this translated into distressing feelings such as mental exhaustion or dissatisfaction with their natural appearance. Although fewer women

reported extreme items such as hopelessness or self-harm, the fact that these responses were present at all signals a need for attention.

7- Implications

These findings enrich our understanding of Moroccan women's digital practices. Unlike studies in Western contexts that emphasize body dissatisfaction alone (e.g., Fardouly et al., 2018), this study suggests that Moroccan women's use of filters is equally about managing cultural pressures, seeking social validation, and exploring identities within a restrictive offline environment. The results call for culturally sensitive interventions: media literacy programs could encourage critical engagement with filters, while campaigns led by Moroccan influencers could normalize unfiltered self-presentation. A novel contribution of this study is its culturally specific analysis of AR filter use among Moroccan women, revealing that distinct psychosocial motives, appearance, validation, and identity exploration, are equally influential, challenging dominant assumptions that beauty enhancement is the primary driver of filter engagement.

8- Limitations

The cross-sectional design prevents causal inference; longitudinal designs could track whether long-term filter use intensifies distress. The reliance on self-reports may underestimate use due to social desirability. The sample, though sizable, was limited to women and may not generalize across gender or socioeconomic strata. Future research could explore qualitative narratives of Moroccan women to capture the subtleties of negotiating beauty norms online, or examine moderating factors such as religiosity, urban vs. rural differences, and generational shifts.

9- Conclusion

This study examined the use of AR beauty filters among Moroccan women, focusing on their motives for use, effects on self-perception, and potential links to psychological distress. The findings revealed that appearance-related, validation/mood, and exploration motives were

all endorsed, highlighting the multifaceted role of filters as tools of both conformity and self-expression. Frequent filter use significantly predicted heightened self-perception concerns, including dissatisfaction with natural appearance, reduced self-esteem, and avoidance behaviors. By contrast, filter use did not significantly predict broader psychological distress, though descriptive results indicated that a subset of participants reported exhaustion, dissatisfaction, or harmful thoughts. These results highlight the nuanced role of filters: while they provide opportunities for playful self-presentation, they also risk reinforcing insecurities and negative self-comparisons.

Beyond contributing to international debates on digital beauty practices, this study brings attention to the Moroccan context, where cultural expectations, beauty norms, and social media engagement intersect in unique ways. The findings revealing the importance of situating digital self-presentation within local cultural frameworks while recognizing its global dimensions. Practical implications include the need for media literacy programs and awareness campaigns that encourage critical reflection on filter use and promote healthier approaches to self-presentation.

Conflict of Interest: The corresponding author, on behalf of second author, confirms that there are no conflicts of interest to disclose.

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Appendix

Descriptive Statistics for Mental Health Impact Items (N = 295)

Item	M	SD	Min	Max
The constant use of beauty filters leaves me feeling mentally exhausted and overwhelmed.	2.47	1.23	1	5
After using beauty filters, I sometimes feel more depressed or dissatisfied with my natural appearance.	2.33	1.20	1	5
The pressure to match my edited appearance has influenced my eating habits or body image concerns.	2.13	1.18	1	5
I occasionally experience harmful thoughts about my appearance or self-worth due to the contrast between my real and edited images.	2.19	1.18	1	5
The inability to look like my filtered self has, at times, made me feel hopeless or given rise to thoughts of self-harm.	1.64	0.99	1	5