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THE BIOPSYCHOSOCIAL DIMENSIONS OF SKINCARE
ADDICTION**

Usman Jaffer¹, Sara Malyana Hanisofian², Nur Syahmina Athirah Muhamad Zaib³, Nur Atifah Syazwani Sopian⁴, Siti Zulaikha Ismadi⁵, Che Mohd Nasril Che Mohd Nassir⁶, Mohamed Ayaaz Ahmed⁷, Rahmah Ahmad H. Osman^{8*}

¹ AbdulHamid AbuSulayman Kulliyyah of Islamic Revealed Knowledge and Human Sciences, International Islamic University Malaysia, 50728 Kuala Lumpur, Malaysia

Email: jafferu@iium.edu.my

² AbdulHamid AbuSulayman Kulliyyah of Islamic Revealed Knowledge and Human Sciences, International Islamic University Malaysia, 50728 Kuala Lumpur, Malaysia

Email: sm.hanisofian@live.iium.edu.my

³ AbdulHamid AbuSulayman Kulliyyah of Islamic Revealed Knowledge and Human Sciences, International Islamic University Malaysia, 50728 Kuala Lumpur, Malaysia

Email: syahmina.athirah@live.iium.edu.my

⁴ AbdulHamid AbuSulayman Kulliyyah of Islamic Revealed Knowledge and Human Sciences, International Islamic University Malaysia, 50728 Kuala Lumpur, Malaysia

Email: atifah.sopian@live.iium.edu.my

⁵ AbdulHamid AbuSulayman Kulliyyah of Islamic Revealed Knowledge and Human Sciences, International Islamic University Malaysia, 50728 Kuala Lumpur, Malaysia

Email: szulaikha.i@live.iium.edu.my

⁶ Department of Anatomy and Physiology, School of Basic Medical Sciences, Faculty of Medicine, Universiti Sultan Zainal Abidin (UniSZA), 20400 Kuala Terengganu, Terengganu, Malaysia

Email: nasrilnassir@unisza.edu.my

⁷ Southern Ambition 473 CC, 7764, Cape Town, South Africa

Email: ayaaz@reamz.co.za

⁸ AbdulHamid AbuSulayman Kulliyyah of Islamic Revealed Knowledge and Human Sciences, International Islamic University Malaysia, 50728 Kuala Lumpur, Malaysia

Email: rahmahao@iium.edu.my

* Corresponding Author

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Abstract:

Skincare, traditionally perceived as a self-care practice for promoting healthy skin, has recently emerged as a potential behavioural addiction. This paper explores the multifaceted nature of skincare addiction by examining its psychological, physiological, and social underpinnings. First, the discussion highlights how stress and coping strategies can inadvertently foster compulsive

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product usage, especially when individuals seek immediate relief or improved self-image. Second, it underscores how fear of missing out (FOMO), marketing tactics, and entrenched beauty standards contribute to impulsive buying and overuse of products. Third, the review demonstrates how positive emotions, enhanced self-esteem, and emotional attachment to skincare products activate neural reward circuits, further reinforcing potentially addictive behaviours. Drawing on relevant case studies, the paper contextualizes these factors within contemporary social media-driven marketing ecosystems. Lastly, it proposes preventative measures and interventions—ranging from cognitive-behavioural therapy to stricter policy regulations—aimed at mitigating the risk of compulsive skincare behaviours. By synthesizing existing theoretical and empirical insights, this work seeks to advance the understanding of skincare addiction and encourage further research on emerging behavioural dependencies.

Keywords:

Behavioural Addiction, Fear of Missing Out (FOMO), Positive Perceptions, Skincare Addiction, Social Media Influence, Stress and Coping

Introduction

The term "addiction" often evokes images of substance abuse—alcohol, opioids, nicotine, and other drugs that profoundly impact an individual's physical and psychological well-being (Volkow, 2014). However, addiction extends beyond substance misuse. Compulsive engagement in specific activities or over-reliance on certain products, whether gambling, gaming, social media, or even skincare, manifests across various contexts (Alavi et al., 2012; Zou et al., 2017). Unfortunately, mainstream media frequently skews public perception by predominantly showcasing the extreme negative outcomes of drug addiction. This fosters the misconception that addiction is exclusively substance-related and stems solely from a lack of willpower (Barry et al., 2014; Vonasch et al., 2017). This attitude obscures the reality that any habit, if recurrent, physiologically or psychologically rewarding, and maintained despite adverse consequences, can evolve into a form of behavioural addiction (American Psychiatric Association [APA], 2022; Raypole, 2022).

While substance addiction undoubtedly warrants serious concern and intervention, there is a growing recognition of non-substance or behavioural addictions (Alavi et al., 2012). These addictions share numerous similarities with substance addictions, including psychological and physiological implications. For instance, both substance and behavioural addictions involve dopamine release accompanying the behaviour or substance use, driving individuals to seek repetitive engagement (Raypole, 2022). Similarly, withdrawal or abstinence from these behaviours can trigger anxiety, irritability, and other mental health issues (Zou et al., 2017). Gambling, compulsive buying, binge eating, and even excessive smartphone use have all been scrutinised as potential behavioural addictions in recent years (Koran et al., 2006; Zou et al., 2017).

An emerging area gaining traction is the potentially addictive nature of skincare. Widely promoted as a pathway to self-care, good health, and improved self-esteem, skincare has grown astronomically in popularity (Rodgers, 2023). In many cultures, physical appearance—particularly healthy, glowing skin—holds significant social and personal importance. This can lead consumers to invest heavily in multiple products: cleansers, moisturisers, serums,

sunscreens, exfoliators, and more (Upadhyay et al., 2021). This phenomenon is amplified on social media platforms, where influencers and celebrities regularly showcase elaborate and expensive routines, framing them as essential and desirable. Driven by the promise of "perfect skin," consumers risk spiralling into compulsive product usage and over-purchasing (Park et al., 2020).

In Malaysia, the beauty and personal care industry is a significant market, with the skincare segment projected to reach USD 171.30 million by 2025. The average revenue per user in the skincare market is expected to amount to USD 50.851. This highlights the substantial investment consumers are making in skincare products, potentially leading to addictive behaviours.

Despite this observed trend, there remains a paucity of empirical data on "skincare addiction." While considerable research explores the adverse outcomes of compulsive shopping in general, few studies explicitly focus on the intersection of cosmetic usage, psychological reinforcement, and detrimental overuse. Therefore, this paper aims to offer foundational insights into skincare addiction by analysing potential contributing factors, including: (1) stress and coping mechanisms, (2) fear of missing out (FOMO) and excessive buying, and (3) positive perceptions, experiences, and attachment. Subsequent sections will explore contemporary psychological and physiological issues associated with intense skincare usage and suggest interventions. Through this discussion, researchers can gain a preliminary framework for further empirical examination of skincare addiction and expand our understanding of behavioural addictions in a modern consumer environment.

Scope and Objective

The scope of this paper encompasses the examination of skincare addiction as a behavioural addiction, drawing parallels with other non-substance addictions. The objective is to provide a comprehensive overview of the factors contributing to skincare addiction, its psychological and physiological implications, and potential interventions. This includes:

1. Analysing stress and coping mechanisms that drive individuals towards excessive skincare routines.
2. Investigating the role of fear of missing out (FOMO) and its impact on compulsive buying behaviours.
3. Exploring the positive perceptions, experiences, and emotional attachments associated with skincare products.

By addressing these aspects, the paper aims to contribute to the broader understanding of behavioural addictions and inform future research and interventions.

Methods

This narrative review employed a systematic search strategy to identify relevant literature on skincare addiction and related concepts. The following databases were searched from 2014 - 2024: PubMed, PsycINFO, Scopus, and Web of Science. Keywords used in the search included "skincare addiction," "compulsive skincare," "cosmetic overuse," "beauty addiction," "skincare dependence," "FOMO skincare," "stress and skincare," and "attachment and skincare."

Inclusion Criteria:

- Peer-reviewed articles published in English.
- Studies examining psychological, behavioural, or neurological aspects of excessive skincare usage.
- Articles discussing potential contributing factors to skincare addiction (e.g., stress, FOMO, social media influence).
- Papers exploring potential interventions or preventative strategies.

Exclusion Criteria:

- Articles solely focused on dermatological conditions without addressing psychological or behavioural components.
- Studies exclusively examining cosmetic surgery or invasive procedures.
- Conference abstracts, dissertations, and non-peer-reviewed sources.

The initial search yielded 1,247 articles. After removing duplicates and screening titles and abstracts, 85 articles were selected for full-text review. Following a thorough assessment, 52 articles were deemed relevant and included in this review. Reference lists of included articles were also hand-searched to identify additional relevant publications.

Data extracted from the included studies encompassed:

- Definitions and conceptualisations of skincare addiction.
- Potential risk factors and contributing factors.
- Psychological and physiological consequences of excessive skincare use.
- Proposed interventions and treatment strategies.
- Relevant theoretical frameworks (e.g., Opponent-Process Theory).

The findings were synthesised narratively, organising the information into key themes and subthemes to provide a comprehensive overview of the current state of knowledge on skincare addiction. Due to the qualitative nature of this review, a formal quality assessment of included studies was not conducted. However, the authors critically appraised the literature, considering methodological limitations and potential biases.

Literature Analysis and Synthesis***Stress and Coping Mechanisms******Understanding Stress and its Impact on the Skin***

Stress is a ubiquitous aspect of life. The World Health Organization (WHO, 2023) defines it as "a state of worry or mental strain caused by demanding circumstances." While some degree of stress is beneficial, driving motivation and productivity, chronic stress can disrupt physical and mental health (Sharma & Sharma, 2019). Stress-related physiological changes include the release of cortisol and other hormones that prepare the body for "fight-or-flight." These hormonal cascades can also manifest externally, most notably on the skin (Hall et al., 2012; Sharma & Sharma, 2019).

The skin, the body's largest organ, acts as a primary sensory interface and is highly responsive to stress (Choi & Di Nardo, 2018). During periods of acute or chronic stress, chemical messengers such as neuropeptides are released improperly, causing inflammatory responses that may result in acne, eczema, or psoriasis flare-ups (Hall et al., 2012; Schut et al., 2016). The hypothalamic-pituitary-adrenal (HPA) axis further mediates these effects. When stress becomes unrelenting, immune function may be compromised, exacerbating skin conditions and overall wellness (Morey et al., 2015; Seiler et al., 2019). Studies on undergraduate and medical students frequently document self-reported skin issues, including acne and rashes, during exam periods or other high-stress times (Schut et al., 2016; Saif et al., 2018).

Skincare Products as Stress Coping Tools

The discomfort and embarrassment accompanying stress-induced skin flare-ups may motivate individuals to find immediate relief. For some, skincare products can become a coping mechanism. This extends beyond the product's mere biochemical promise – such as reducing acne or correcting dryness – and into the psychological domain of comfort. Massaging cleansers or creams into the skin triggers the release of endorphins, serotonin, and dopamine, while simultaneously lowering cortisol levels, collectively promoting a relaxation response (Springer et al., 2022; Drew, 2023).

Bouhot et al. (2022) identified a significant parasympathetic response to facial skincare, surpassing that observed during simple rest periods. The added element of olfactory stimulation – using fragrant oils, scented creams, or aromatic lotions – also contributes to relaxation by reducing anxiety through the GABAergic system (Springer et al., 2022). Over time, this pleasant, stress-relieving effect may become rewarding in itself, potentially fostering repeated product use that progresses into compulsive behaviour (Sharma & Sharma, 2019; Raypole, 2022).

Therefore, the tangible improvements in skin health combined with mood-lifting properties might reinforce the habitual (and later, compulsive) application of skincare. The repeated cycle – stress, skincare usage, short-term physiological or psychological relief – can solidify into an addictive pattern as the individual continually seeks both external (clearer skin) and internal (relaxation, dopamine release) rewards.

Fear of Missing Out (FOMO) and Excessive Buying

FOMO as a Psychological Driver

Fear is a universal emotion, regulated in large part by the amygdala, which detects threats and provokes responses aimed at avoidance (Adolphs, 2013). A modern, socially oriented derivative of fear is the Fear of Missing Out (FOMO) – anxiety that one is absent from a socially or personally rewarding experience (Przybylski et al., 2013, as cited in Sari & Darma, 2024). In the skincare realm, FOMO manifests when consumers feel pressured to adopt new products or routines to avoid "missing out" on the latest trends and perceived benefits (Sari & Darma, 2024; Ardianti & Sofyan, 2024).

This phenomenon is further fuelled by social media platforms (e.g., Instagram, TikTok, YouTube), where influencers and dermatologists endorse myriad products, sometimes marketing them as "exclusive" or having "limited stock." Coupled with the desire to conform

to societal standards of beauty (Malik, 2022), individuals may be inclined to purchase multiple items in quick succession, leading to impulsive and excessive buying (Natasya et al., 2024).

Beauty Standards, Influencer Marketing, and Impulsive Buying

Societal and cultural standards, particularly those promoting clear, white, or "flawless" skin, reinforce the buying impulse (Malik, 2022). High-profile celebrities, such as K-Pop idols or Hollywood actors, significantly impact consumer behaviour through endorsements (Sari & Darma, 2024). When a popular figure lauds a certain serum or moisturiser, consumers often interpret these endorsements as direct validations of a product's quality (Ardianti & Sofyan, 2024).

Moreover, many skincare brands use scarcity marketing – limiting product availability to amplify demand and expedite purchases. In a digital marketplace replete with real-time reviews and countless recommended "holy grail" items, FOMO intensifies (Koran et al., 2006; Sari & Darma, 2024). Consequently, overbuying arises, leaving individuals with cabinets full of half-used or unopened products.

Excessive Usage and Dopamine Release

Once individuals have easy access to a surplus of products, they may experiment with layering multiple items or applying them more frequently to maximise efficacy (Jayathilake et al., 2024). This excessive usage can inadvertently disrupt the skin barrier, worsening inflammation or breakouts and perpetuating the cycle of searching for the "next big thing" (Pollock, 2023). Simultaneously, the act of applying skincare – particularly a favoured product – can activate reward circuits in the brain, partly due to dopamine release (Cleveland Clinic, 2022). Over time, this "feel-good" hormone reinforces the behaviour, contributing to habituation or tolerance, meaning an individual may require more frequent applications or additional products to maintain the same sense of pleasure (Volkow, 2014, APA, 2022).

Positive Perceptions and Experiences

Enhanced Self-Esteem and Emotional Well-Being

A compelling reason for continued skincare usage relates to the tangible improvements in skin quality and the subsequent boost to self-esteem (Kosmala et al., 2019). Studies show that positive self-perceptions – especially about one's appearance – can elevate mood and social confidence (Rodgers, 2023). Anticipation of these benefits can drive repeated engagement, and in some cases, lead to an over-reliance on skincare products for self-validation (Moriya et al., 2024).

In their electroencephalogram (EEG) study, Moriya et al. (2024) observed heightened activity in sensorimotor brain regions correlated with pleasurable touch and reduced activity in the visual cortex, suggesting a focus on the self rather than external stimuli. This underscores how individuals may become absorbed in the comforting, self-oriented act of applying skincare, further solidifying the habit.

Opponent-Process Theory

Solomon and Corbit's (1974) Opponent-Process Theory offers a useful lens for understanding how positive experiences (initially triggered by skincare use) eventually mingle with negative consequences (over-purchasing, emotional distress, or addiction). This duality illustrates that

as individuals persist in seeking the "high" of skincare usage – be it glowing skin, stress relief, or social recognition – the negative side effects (financial strain, product hoarding, or skin irritation) may intensify over time. Some persist regardless of these drawbacks, indicative of an addictive pattern (Ferrer-Pérez et al., 2024).

Attachment

Emotional Bonds with Skincare Products

Attachment involves the formation of an emotional bond to a person, object, or experience, accompanied by increased neural activity in regions linked to reward and familiarity (Hirao et al., 2021; Kikuchi et al., 2021). In the context of skincare, repeated use and trusted results can foster strong emotional ties to particular brands or products. Individuals may fear switching products, worrying about relapse into worse skin conditions or losing a sense of comfort (Kikuchi et al., 2021).

Neurological Underpinnings of Object Attachment

Research indicates that touching behaviours associated with product application – such as massaging a face cream – stimulate the release of oxytocin (OXT), further enhancing emotional bonding (Kikuchi et al., 2021). Over time, elevated oxytocin and activity in the dorsal raphe nucleus, periaqueductal grey matter, and ventral pallidum reinforce positive feelings toward skincare products (Hirao et al., 2021; Kikuchi et al., 2021). As such, an emotional loop is formed: favourable results foster attachment; attachment strengthens the perceived necessity of the product; frequent usage cements a habit that can veer into addiction when used excessively or anxiously.

Real-World Cases and Psychosocial Triggers

With social media transforming how consumers gather information, skincare addiction stories are steadily surfacing. Otte (2023) documented cases in which individuals admitted to spending disproportionate amounts of money on beauty products for the sake of self-care and personal pleasure. One woman, Jenny, hoarded unopened boxes of skincare items, firmly believing these purchases were "investments." Another individual, Sarah, felt influenced by TikTok product reviews, associating skincare use with confidence and emotional well-being.

Pollock (2023) highlighted how larger psychosocial issues – such as bipolar disorder, Attention Deficit Hyperactivity Disorder (ADHD), and chronic anxiety – interact with skincare compulsion. Erica, who struggled with bipolar disorder and ADHD, described her impulsive drives to buy 30 or more products at once, seeking a dopamine "rush" to combat her depressive or agitated states. This narrative echoes the broader principle that addictive behaviours, including compulsive skincare purchasing, can function as self-medication strategies for underlying mental health challenges (Seiler et al., 2019; APA, 2022).

Meanwhile, FOMO remains ever-present in younger demographics. Teenagers and even children, like an 8-year-old named Sadie, develop strong peer-influenced anxieties about "missing out" on globally trending brands or routines (Rackham, 2024). Such narratives demonstrate that skincare addiction is not confined to a single demographic but may pervade multiple age groups.

Potential Treatment and Preventive Strategies

Addressing skincare addiction requires a multi-faceted approach due to its complex nature. Professional interventions such as Cognitive-Behavioural Therapy (CBT) can help individuals identify triggers like stress, FOMO, and low self-esteem, while equipping them with coping mechanisms like cognitive restructuring and stimulus control (NIDA, 2023). In cases where co-occurring disorders like anxiety or depression are present, pharmacotherapy may be beneficial in stabilising mood and indirectly reducing compulsive behaviours (APA, 2022).

Stress management techniques, particularly Mindfulness-Based Stress Reduction (MBSR), can help individuals shift away from constant worry about skincare by incorporating practices like deep breathing and meditation to reduce cortisol levels and reliance on quick fixes (Worthen & Cash, 2023). Strong support networks are also crucial. Support groups provide a space for shared experiences and collective problem-solving, while family and friends offer accountability (Pollock, 2023).

Furthermore, policy and social media regulation can play a preventative role. Policymakers could enforce stricter guidelines on influencer marketing and product claims to limit unrealistic beauty standards (Rohimi, 2022). Consumer education campaigns clarifying safe usage, potential risks, and the reality of "perfect skin" illusions can empower consumers to make informed decisions (Rezky, 2024). Finally, parental guidance in monitoring children's social media use and educating them about advertising tactics can help prevent FOMO-driven purchasing (Rackham, 2024). School programs incorporating discussions on body image and critical media literacy can further empower adolescents to critically evaluate advertising claims (Gupta & Sharma, 2021).

Findings

The review of literature revealed several key insights into the emerging phenomenon of skincare addiction. Firstly, although not formally recognised in diagnostic manuals, skincare addiction appears to share core features with other behavioural addictions, including repetitive engagement despite negative consequences, psychological distress upon abstinence, and potential biochemical reinforcement through dopamine and oxytocin release. Secondly, multiple factors contribute to the development of this addictive behaviour, including the use of skincare products as coping mechanisms for stress, fear of missing out (FOMO) driving excessive buying, positive reinforcement from improved skin and enhanced self-esteem, and emotional attachment to specific products or brands. Thirdly, social media platforms play a significant role in promoting unrealistic beauty standards, fuelling consumerism, and contributing to FOMO and excessive buying. Fourthly, skincare addiction may co-occur with other mental health conditions, such as anxiety, depression, or ADHD, with individuals potentially using skincare as a form of self-medication.

Furthermore, the review highlighted the limited empirical research directly investigating skincare addiction, indicating a need for more robust studies, including longitudinal designs and neuroimaging approaches, to understand the underlying mechanisms and long-term consequences. Despite the limited research, preliminary interventions such as cognitive-behavioural therapy (CBT), stress management techniques, support groups, and educational initiatives show promise for prevention and treatment. Finally, the review suggests that policy and regulatory measures, including stricter guidelines on influencer marketing and consumer

education campaigns, may be necessary to mitigate the risks associated with skincare addiction and promote informed decision-making.

Table 1: Summary of Key Findings

Key Finding	Description	Supporting Evidence
Skincare addiction resembles other behavioural addictions.	Although not formally recognised, it exhibits core features like repetitive engagement despite negative consequences, distress upon abstinence, and potential biochemical reinforcement.	Alavi et al. (2012), Volkow (2014), Kikuchi et al. (2021)
Multiple factors contribute to its development.	These include stress and coping mechanisms, FOMO and excessive buying, positive perceptions and experiences, and emotional attachment to products.	Sharma & Sharma (2019), Sari & Darma (2024), Kosmala et al. (2019), Hirao et al. (2021)
Social media plays a significant role.	Platforms like Instagram and TikTok promote unrealistic beauty standards, fuel consumerism, and contribute to FOMO and excessive buying.	Park et al. (2020), Malik (2022), Ardianti & Sofyan (2024)
Co-occurrence with other mental health conditions is possible.	Individuals with anxiety, depression, or ADHD may use skincare as a form of self-medication.	Pollock (2023), APA (2022), Seiler et al. (2019)
Empirical research is limited.	More robust studies, including longitudinal designs and neuroimaging, are needed to understand underlying mechanisms and long-term consequences.	
Preliminary interventions show promise.	CBT, stress management techniques, support groups, and educational initiatives are potential strategies for prevention and treatment.	NIDA (2023), Worthen & Cash (2023), Pollock (2023)
Policy and regulatory measures may be necessary.	Stricter guidelines on influencer marketing and consumer education campaigns can promote informed decision-making and mitigate risks.	Rohimi (2022), Rezky (2024)

Conclusion

This narrative review provides a comprehensive overview of the emerging phenomenon of skincare addiction, highlighting its core features, contributing factors, and potential implications. Although not formally recognised in clinical diagnostic manuals, skincare addiction exhibits hallmark signs of behavioural addiction, including repetitive engagement, difficulty discontinuing use despite adverse effects, psychological distress when abstaining, and underlying biochemical reinforcement. Multiple catalysts drive this phenomenon, including stress-coping strategies, FOMO and excessive purchasing behaviours, positive perceptions and emotional experiences, and strong attachments to skincare products.

However, it is essential to acknowledge the limitations of this review. Firstly, the reliance on published literature introduces a potential publication bias, where studies with significant findings may be overrepresented. Secondly, the qualitative nature of the review limits the ability to conduct a meta-analysis or draw definitive conclusions about causality. Thirdly, the rapidly evolving landscape of social media and skincare trends necessitates continuous updates to the research.

Future research should prioritise more rigorous empirical investigations, including longitudinal studies and neuroimaging approaches, to confirm causality, examine individual differences, and explore the long-term consequences of skincare addiction. Additionally, cross-cultural studies are needed to investigate the influence of diverse beauty standards and socio-cultural norms on skincare behaviours. Furthermore, research should examine the efficacy of various interventions, including CBT, stress management techniques, and support groups, in treating skincare addiction.

Despite these limitations, this review offers a valuable foundation for understanding skincare addiction. By comprehensively examining the biopsychosocial dimensions of this emerging phenomenon, researchers and clinicians can further illuminate the complexities of behavioural addictions in the digital age and devise effective prevention and treatment protocols for those vulnerable to compulsive beauty and skincare practices. Ultimately, promoting responsible skincare habits, fostering media literacy, and addressing underlying psychological needs are crucial steps in mitigating the potential risks associated with this increasingly prevalent behaviour.

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