



Development and Preliminary Validation of the Vulgar Content Exposure Experience Scale

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ABSTRACT

In the present study, the Vulgar Content Exposure Experience Scale (VCEES) was developed and validated using an exploratory sequential mixed-methods design. For Phase 1, 15 participants were interviewed and 48 items were developed. Data obtained from 300 participants (18-50 years) were analyzed using Exploratory Factor Analysis with Varimax rotation in Phase 2. Results confirmed a three-factor structure: Cognitive-Moral Evaluation, Active Behavioral Exposure and Passive Algorithmic Exposure. The final 33-item scale demonstrated good reliability ($\alpha = .915$) and acceptable to excellent subscale reliability (.820–.961). Convergent validity was supported by a significant correlation with an established measure, $r = .564$, $p < .001$. The results indicate that vulgar content exposure is a multifaceted phenomenon shaped by cognitive, behavioral, and algorithmic processes.



Introduction

Digital media has changed how people are exposed to and respond to online content. One emerging concern in media psychology is vulgar content, defined as media content that violates accepted standards of decency, morality and social acceptability for example, sexual content, cursing, hate speech, cyberbullying and graphic violence. While exposure in traditional media can be planned and shaped by institutional gatekeeping, the digital environment offers ongoing, algorithmically managed, often unplanned, repetitive and structurally embedded exposure in everyday media use (Livingstone & Smith, 2014; Montag & Hegelich, 2020).

There is no single definition of vulgar content due to cultural, contextual, and legal variation. Vulgarity is not an inherent category of media content; rather, it is socially constructed and shaped by norms, religion, and institutional structures (Heins, 2007). The legal definition of it is provided

by the Miller v. California (1973) obscenity standard, which includes the prurient interest and lack of social value, and psychological and communication research adds profanity, hate speech, sexual imagery, and violent content (Anderson et al., 2010; Brown, 2017). This variability makes it hard to standardize the operational definition of the concepts in media psychology research.

Vulgar content has been studied from the Social Learning Theory and the Cultivation Theory from a psychological perspective. Social Learning Theory suggests that people learn behaviors, attitudes and emotional reactions by observing and imitating models, especially when the behaviors are rewarded or socially approved (Bandura, 2001). Reinforcement is intrinsic in the functions of digital platforms like likes, shares and comments, and the algorithmic amplification can contribute to increased exposure and apparent acceptability of vulgar behaviors (Krcmar & Greene, 1999). However, Cultivation Theory is more interested in long-term 'exposure effects' and posits a slow process of media messages affecting people's perception of social reality and norms (Gerbner et al., 1986; Morgan & Shanahan, 2010).

These theoretical assumptions are backed up by empirical evidence. Exposure to sexually explicit content has been associated with changes in sexual attitudes, and the normalization of sexual behaviors, particularly for youth and adolescents (Hald & Malamuth, 2008). Similarly, viewing violent media has been associated with increased aggressive cognition and reduced prosocial behavior, particularly among younger age groups when there are still developing capacities for self-regulation (Anderson et al., 2010; Anderson et al., 2017). These findings suggest greater psychological and behavioral shifts when there is more exposure.

Exposure to vulgar content in digital spaces is multilayered with different structures, agency and social/psychological impact. One of the more powerful processes is algorithmic exposure, which is when platforms like TikTok, YouTube, Instagram, Facebook, X (Twitter) and Snapchat give more weight to content that generates high engagement. Since they are designed to retain users' attention, this content is often propagated to the user repeatedly, even if the user does not actively look for such content (Bail et al., 2018; Montag & Hegelich, 2020). This is a structural transition from the active content searching to passive algorithmic content delivery, that is, the content exposure is continuously shaped by personalization processes of platforms.

A second pathway is peer-mediated exposure, which takes place via private communication channels like WhatsApp, Snapchat, and Discord. Vulgar content is disseminated in trusted social networks, and may be perceived as more acceptable and is less likely to be critically challenged in those settings. Peer-to-peer communication is done without external moderation and in a context of intimacy, and thus the normalization processes are amplified. Empirical evidence finds that in these situations, where there are pressures for social conformity, youths are likely to be more susceptible to peer influence and are more likely to accept inappropriate or offensive content (Livingstone et al., 2011).

The third pathway is through "interactive exposure" in online gaming settings. Multiplayer games often involve real-time voice and text interaction with other users, in which it is common to hear: slurs, harassment, and sexually explicit content. Younger users, whether or not they are young people themselves, are more likely to be accessing mature rated communication, meaning that they are exposed to inappropriate communication patterns more than once. Because they offer more active than less active engagement, they also afford higher levels of emotional engagement and internalization than passive media consumption formats like watching TV, games can provide greater sense of immersion and involvement, and, consequently greater emotional engagement and behavioral internalization than less active styles (Gentile et al., 2014).

Each of the pathways shows that vulgar content is not monolithic in that it does not have a unified experience of vulgarization, instead it is distributed across various and structurally different types of digital spaces: psychological and structural. Algorithmic exposure is when there is low agency and high repetition, peer-mediated exposure involves normalization by trust within intimate networks and interactive exposure involves immersive engagement and behavioral reinforcement. Therefore, each pathway has a different impact on the overall exposure experience and influences how people are exposed and how they process vulgar content in today's digital environments (Bail et al., 2018; Livingstone et al., 2011; Gentile et al., 2014; Montag & Hegelich, 2020).

Vulgar content exposure does not just apply to sexual or violent content, but also to cyberbullying, offensive humor, hate speech and culturally inappropriate content. Studies in psychology have consistently found that such exposure is linked to higher emotional distress, anxiety, stress, and lower psychological well-being in adolescents (Kowalski et al., 2014; Twenge & Campbell, 2018). Idealized and sexualized images in the media also play a role in body dissatisfaction and distorted body image, as it leads to increased social comparison processes, especially in young women (Fardouly & Vartanian, 2016). Repeated exposure may over time lead to desensitization and diminished empathy for harmful or aggressive actions (Anderson et al., 2017).

Behaviorally, contact with vulgar material is linked to altered communication styles and norms of social interaction. People tend to mimic language styles, jokes and cues for certain behaviours they see on the internet, especially if they are reinforced socially. This is consistent with Social Learning Theory, which focuses on how behavior is learned through reinforcement (Bandura, 2001). Additionally, excessive screen time is associated with poor academic performance, trouble paying attention, sleep issues and difficulties with self-regulation (Rideout & Robb, 2019).

The meaning of vulgar content is further complicated by the cultural variability in interpretation. Vulgarity is not an intrinsic characteristic of media, but must be socially produced based on cultural norms, religious values and historical backgrounds. From Bakhtin's dialogic theory, meaning emerges through the interaction between content and context that the same content may carry different meanings across cultures (Bakhtin, 1984). This is particularly relevant to the international environment of the digital sphere where content produced in one cultural context is perceived in a different and altogether different cultural context. Finally, from the literature, it can be determined that the phenomenon of vulgar content exposure is a multi-dimensional phenomenon that is located in technological, psychological, and sociocultural systems. It is shaped by algorithmic recommendation systems, peer-to-peer communication networks, and interactive media environments and is viewed in the context of culturally specific moral and social norms (Livingstone & Smith, 2014; Montag & Hegelich, 2020; Livingstone et al., 2011). There is both theoretical and empirical clarity about repeated exposure and its associations with cognitive, emotional and behavioral adaptations that take place in the short time span of learning and in the long term span in the case of perceptual change (Bandura, 2001; Gerbner et al., 1986; Anderson et al., 2017).

Modern digital platforms also increase exposure to vulgar content through engagement-based ranking systems. Content flows are continually refined by AI algorithms, resulting in increased exposure to emotionally appealing or provocative content (Bail et al., 2018; Montag & Hegelich, 2020). This platform structure can create repeated and unavoidable exposure which is repeated and constant, even when it is not desired by the user and so there is an algorithmic mediation in the structuration of content consumption.

The lack of a uniform assessment of vulgar content exposure experience is a significant obstacle for research on media psychology, as the studies generally only discuss the frequency of exposure

and the behavior afterwards, without referring to individual differences in psychological sensitivity. This limits the capacity to examine in a systematic manner, how emotions, cognition and moral responses to vulgar digital content vary from one study to another.

The present study seeks to solve this problem by considering vulgar content exposure experience as a multidimensional psychological phenomenon and developing a psychometric scale to measure it. The scale aims to assess single differences in emotional responsiveness, cognitive evaluation, and moral sensitivity of contact with obscene material in digital contexts. This study provides a structured measurement tool for assessing psychological responses to contemporary media exposure and supporting future empirical research.

Aims and Objectives

- To develop the Vulgar Content Exposure Experience Scale (VCEES) for measuring individual differences in vulgar content exposure experiences among social media users.
- To test the VCEES for its factor structure, internal consistency, and validity by examining its relationship with other established psychological measures.

Method

A mixed-methods approach combining qualitative and quantitative methods was used in the development and validation of the Vulgar Content Exposure Experience Scale (VCEES) in the present study. A cross-sectional survey design was used to validate the findings from the qualitative study, which was conducted in an exploratory sequential design with the qualitative findings used to guide item generation.

Phase 1: Qualitative Study

Participants

A total of 15 participants were involved in the qualitative phase, which consisted of both males and females ranging in age from 18 to 50 years. The participants were students and community members who actively used digital and social media. Participants were recruited using convenience sampling

Instruments

Demographic Information

The participants' information such as age, gender, educational level and marital status was collected using a structured demographic form.

Semi-Structured Interview Guide

Based on the literature review of digital media psychology and online behavior, a semi-structured interview guide was developed. The guide was developed to explore participants' experiences of vulgar content exposure in digital environments. It contained open-ended items on emotional responses (discomfort, anxiety, embarrassment), cognitive responses (attentional disruption, perceived mental impact) and moral assessments of such content (perceived offensiveness, appropriateness). The guide was flexible enough to allow for questioning that would encourage depth of response in the interviews while also ensuring conceptual consistency across interviews. The interview guide was subject matter expert validated before the data collection. Pilot testing was conducted with a small number of participants to ensure clarity and comprehensibility of the

questions.

Procedure

The first phase of the study was completed to gain insight into the lived experiences of the individuals in relation to being exposed to vulgar content in digital spaces and to develop scale items based on the empirical data. This phase used a qualitative approach based on semi-structured interviews to obtain in-depth contextual information on emotional, cognitive and moral responses to vulgar content exposure.

The interview protocol was developed by a comprehensive review of the literature on digital media psychology, media effects, emotional regulation and Internet behavior prior to the data collection. The interview guide was reviewed by subject-matter experts to establish content validity, clarity, and conceptual alignment. Revisions were made based on expert feedback for clarity and cultural appropriateness. A small number of people also took part in a pilot test where they could check the interview guide for its understanding and relevance to their context, and whether the questions could generate relevant responses. After the instruments were finalized, the ethical approval from the appropriate institutional authority was secured before data collection was started. All participants were told the aim of the study, that it was voluntary, that answers would be kept confidential, and that they could drop out of the study at any time without any repercussions. Each participant gave written informed consent before the interviews.

In-depth semi-structured interviews were used for data collection to ensure consistency and to reduce external distractions, which were conducted in a controlled environment (University) with a quiet setting. The interviews were carried out separately to give the interviewees the opportunity to discuss their experiences without the influence of other participants. The interviewer used the guide flexibly, probing answers to gain deeper insights into the answers, but keeping the focus on emotional, cognitive and moral dimensions of vulgar content exposure.

To ensure that the data is captured accurately, all interviews were audio-recorded with the consent of the participants. Recordings were then transcribed verbatim to capture the meaning and language of the participants' responses. Transcripts were meticulously examined and verified for accuracy and completeness against the audio recordings.

Thematic analysis was used to analyze the transcribed data. The textual data were systematically coded to look for patterns in participants' experiences with vulgar content. Initial codes were created from raw data and subsequently grouped into themes of emotional sensitivity, cognitive sensitivity and moral sensitivity towards vulgar content. These themes were further developed through successive comparison and conceptual grouping to maintain internal coherence and differentiation between the themes. The final thematic structure that emerged from Phase 1 was used as a conceptual framework for item generation for the quantitative phase. These themes helped to ensure that the scale items that were developed were ecologically valid and represented real-life experiences.

Phase 2: Quantitative Study

Participants

The quantitative phase comprised 300 participants (119 females and 181 males) aged 18-50 years. Convenience sampling of the university and community population was used. All participants were active social media users.

Instruments

Demographic Questionnaire

Data pertaining to age, gender, educational qualification, occupation, family system, marital status, socioeconomic status and physical and psychological health conditions were collected through a structured demographic form.

Vulgar Content Exposure Experience Scale (VCEES)

The Vulgar Content Exposure Experience Scale (VCEES) is a 33-item instrument designed to assess experiences of vulgar content exposure across cognitive-moral, behavioral, and algorithmic dimensions. The Vulgar Content Exposure Experience Scale (VCEES) was constructed in a systematic psychometric manner based on an exploratory sequential mixed-methods design. The first phase was qualitative exploration using semi-structured interviews to gain insight into people's lived experiences of exposure to vulgar content in digital environments. Thematic analysis of the interview transcripts was done to identify common psychological patterns as a basis for the conceptualization of the scale.

From the qualitative results, an initial pool of 48 items was developed to capture the multi-dimensionality of sensitivity to vulgar content exposure. The instrument was context specific and directly derived from emergent themes. Each theme was constructed as a statement and aimed at measuring emotional, cognitive and moral sensitivity. Emotional sensitivity items tapped affective responses, including discomfort, anxiety, and embarrassment. Cognitive sensitivity items included attentional disruption, intrusive thoughts, and perceived cognitive interference. Moral sensitivity items were evaluative judgments of the appropriateness and offensiveness of vulgar content in digital environments. All items were rated on a five-point Likert scale ranging from strongly disagree to strongly agree.

After the items were generated, content validity was determined by expert evaluation. Each item was reviewed by subject matter experts in the fields of psychology and media studies for clarity, cultural appropriateness, redundancy, and conceptual alignment with the intended construct. Feedback was used to make revisions to improve the clarity of items and remove any ambiguity.

In the second phase of the study, the item pool was quantitatively evaluated with the refined item pool. Exploratory Factor Analysis was used to investigate the underlying factor structure of the scale, evaluate the performance of items, and examine the dimensional validity of the construct. Retention or removal of items was based on statistical criteria such as factor loadings, cross-loadings, and communalities. Cronbach's alpha was then used to determine the internal consistency reliability of the final scale to assess its homogeneity.

Content-Based Media Exposure Scale (C-ME; den Hamer, 2017)

The Content-Based Media Exposure Scale (C-ME) was used as a convergent validity measure to assess general exposure patterns to digital media content. Previous studies have reported Cronbach's alpha values of 0.80 or greater, which are adequate for research use and the scale has shown acceptable internal consistency in previous studies. The C-ME is a five-point Likert format measure of exposure frequency to antisocial and neutral media content across digital platforms. In this study, it was applied as an external criterion to explore theoretically expected relationships between the extent of media exposure and sensitivity to vulgar media, in line with media effects theories.

Procedure

The second phase of the study was aimed at gathering quantitative data for the psychometric evaluation of the Vulgar Content Exposure Experience Scale (VCEES) and at testing its construct validity. Data collection was based on a structured cross-sectional survey design, and took place after the qualitative item development of Phase 1 was completed.

Before data collection began, the final questionnaire package was developed, consisting of the 48-item preliminary VCEES, Content-Based Media Exposure Scale (C-ME), and a structured demographic form. The survey was administered through Google Forms to make it easily accessible for each participant, to present the items in a consistent way, and to record the responses.

Respondents were active users of social media platforms who were selected using convenience sampling method. Recruitment was done via digital distribution platforms such as messaging apps and social media. They were required to self-identify as having a regular digital media presence, and age range of the participants was limited to 18-50 years old. This criterion was used to ensure that the respondents had enough exposure to online environments where vulgar content is often seen.

An information sheet was provided to participants before they were provided with access to the survey, explaining the purpose of the study, the voluntary nature of participation, confidentiality of responses and that participants could withdraw from the study at any time without consequences. Electronic informed consent was obtained prior to proceeding with the questionnaire. The survey was self-administered and the participants were able to do this at their own time and place. No time limit was imposed; the average completion time was 15 to 20 minutes. All items were randomized and standardized and no identifying data was collected to ensure anonymity in order to reduce response bias.

Responses were automatically recorded in a secure digital database. After completion of the data collection period, responses were screened for completeness, response consistency, and eligibility criteria compliance. To ensure the quality and integrity of the data, incomplete responses, duplicate responses, and patterns of non-serious responding were excluded before analysis.

The final cleaned data was analyzed statistically. Next, Exploratory Factor Analysis (EFA) was performed in SPSS to explore the factor structure of the VCEES. Factor loadings, cross-loadings and communalities were used to decide on the reduction of items. Cronbach's alpha was used to test the internal consistency reliability, and the construct validity was tested by the correlation between the VCEES and C-ME scores based on the existing media effects theory.

Results

The findings of the statistical analyses used to assess the psychometric properties of the Vulgar Content Exposure Experience Scale (VCEES) are presented in this section. An initial pool of 48 items was developed for scale construction. Following expert review, item evaluation, and exploratory factor analysis, the scale was refined to 33 items.

The refined questionnaire was administered to 300 university students and young adults (181 males and 119 females) to gather the data. SPSS version 23 was used to perform all statistical analysis.

Exploratory factor analysis was conducted using principal component extraction and Varimax rotation to obtain a simplified and interpretable factor structure. The Kaiser–Meyer–Olkin (KMO)

measure of sampling adequacy and Bartlett's test of sphericity were used to test assumptions of factorability before factor extraction.

Items were retained if they met the factor loading criteria and those that loaded below the criterion were deleted, as well as those that loaded significantly on two factors. A factor solution was determined using the scree plot and eigenvalues > 1.

Table 1: Demographic characteristics of the participants

Variable	Category	<i>f</i>	Percentage (%)
Age	18-50 years	300	100.0
Gender	Male	181	60.3
	Female	119	39.7
Educational Qualification	Matric	4	1.3
	Bachelor	224	74.7
	MPhil	32	10.7
Occupational Status	Student	164	54.7
	Professional	68	22.7
	Unemployed	40	13.3
	Part time worker	28	9.3
Family System	Nuclear family	104	34.7
	Joint family	196	65.3
Marital Status	Married	228	76.0
	Unmarried	72	24.0
Family Income	High income	28	9.3
	Middle income	240	80.0
	Low income	32	10.7
History of Physical Illness	Yes	8	2.7
	No	260	86.7
	Maybe	32	10.7
History of Psychological Illness	Yes	20	6.7
	No	280	93.3

Note. *f*= frequency, %=percentage

The demographic characteristics of the participants are shown in Table 1. A total of 300 respondents aged 18-50 years were sampled. Of the total sample, 181 participants were male (60.3%) and 119 were female (39.7%). In terms of educational qualification, the majority of the respondents were bachelor ($n = 224$, 74.7%) followed by intermediate education ($n = 40$, 13.3%), MPhil ($n = 32$, 10.7%) and matric ($n = 4$, 1.3%).

Concerning occupation, more than half of the participants were students ($n = 164$, 54.7%), followed by professionals ($n = 68$, 22.7%), unemployed participants ($n = 40$, 13.3%) and part-time workers ($n = 28$, 9.3%). The majority of the participants were from joint family systems ($n = 196$, 65.3%) and 104 participants (34.7%) were from nuclear family system. In terms of marital status, 228 (76.0%) were married and 72 (24.0%) were unmarried.

In terms of financial status, most of the participants were in the middle income group ($n = 240$, 80.0%), followed by the lower income group ($n = 32$, 10.7%) and upper income group ($n = 28$, 9.3%). The majority of participants said they had not had a physical illness previously ($n = 260$,

86.7%), 8 participants (2.7%) reported a history of physical illness and 32 participants (10.7%) selected “maybe.” Likewise, the majority of participants indicated that they had no history of psychological illness (n = 280, 93.3%) while 20 (6.7%) indicated that they had a history of psychological illness.

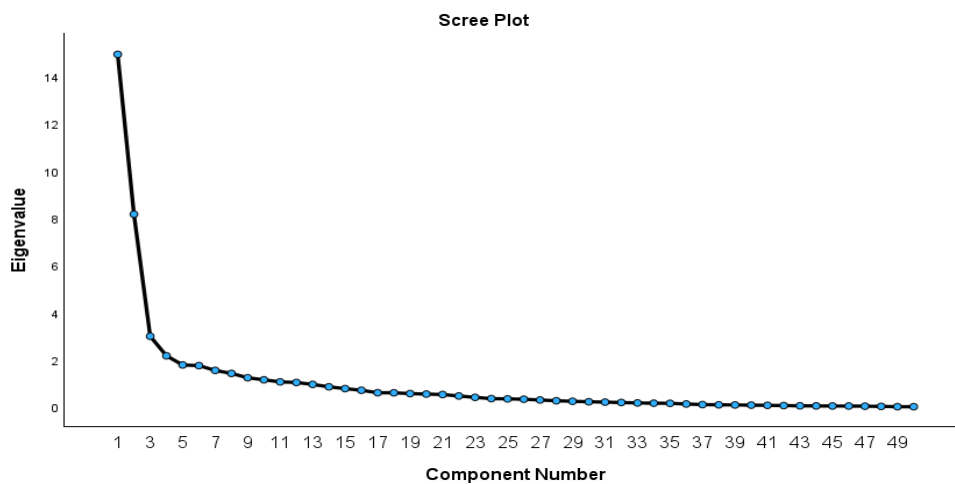
Table 2: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.698
Bartlett's Test of Sphericity	Approx. Chi-Square	16863.061
	Df	1225
	Sig.	<.001

Note. KMO=Kaiser-Meyer-Olkin, df=degree of freedom, Sig=Significance level

The Kaiser–Meyer–Olkin measure of sampling adequacy and Bartlett's test of sphericity were used to assess the suitability of the data for factor extraction prior to conducting exploratory factor analysis. The KMO value was .698, which is considered an acceptable level of sampling adequacy in exploratory factor analysis. Bartlett's test of sphericity was statistically significant, $\chi^2(1225) = 16863.061$, $p < .001$, indicating that the correlation matrix was not an identity matrix and that there were enough correlations between the items to use factor analysis. These results confirmed the suitability of exploratory factor analysis.

Figure 1: Scree Plot of the Eigenvalues



The scree plot shows a clear elbow at the third component, after a sharp drop from the first two components and a gradual flattening thereafter. This indicates that a three-factor solution is optimal, with the first three components explaining most of the meaningful variance, while remaining components contribute minimally and are likely noise.

Table 3: Factor Loadings for the Vulgar Content Exposure Experience Scale

	Component		
	1	2	3
Is this type of content harmful for young people?	.820		
Is it necessary to curb/control vulgar content on digital media?	.818		
Does vulgar content affect moral sensitivity?	.817		
Is awareness about the harms of vulgar content necessary among the public?	.815		

Have you tried to avoid this type of content?	.810	
Does watching vulgar content bring about a change in sexual behavior?	.802	
Has watching vulgar content brought a change in people's behavior?	.786	
Does this kind of content negatively affect the family system?	.785	
Should parents keep an eye on their children's media usage?	.777	
Does vulgar content negatively affect social values?	.774	
Should the government take effective action against vulgar content by enforcing laws?	.769	
Is there a need for awareness programs about vulgar content?	.747	
Are inappropriate scenes commonly seen in online videos?	.746	
Do you use privacy settings to avoid vulgar content?	.723	
Is vulgar content the cause of moral decline in the younger generation?	.673	
Are online platforms failing to effectively control vulgar content?	.673	
Do you feel mental restlessness after watching vulgar content?	.621	
Do you watch immoral content late at night?		.818
While using the internet on your mobile phone, do you search for immoral websites?		.764
Do you neglect your daily responsibilities because of watching immoral content?		.738
Do you watch more inappropriate/biased videos on Instagram Reels?		.726
Do you deliberately visit pages, groups, or communities where immoral content is shared?		.716
Do you watch dramas or films that involve inappropriate dress or immoral content?		.679
Do you like or share social media posts with double-meaning comments?		.673
Do your friends or family send you immoral content on WhatsApp?		.662
Do you watch vulgar content intentionally?		.640
Do videos, stories, and clips contain more vulgar elements?		.627
Does continuous exposure reduce your emotional sensitivity?		.626
Even without searching for it, how does vulgar content end up appearing on social media apps?		.696
Have government media or policy institutions failed to control vulgar content?		.672
Is it difficult to avoid immoral content while using the internet?		.644
Have you seen vulgar content on various online platforms?		.629
Is vulgar content commonly available on digital media?		.623

Extraction Method: Principal Component Analysis; Rotation Method: Varimax with Kaiser Normalization.

The exploratory factor analysis of the Vulgar Content Exposure Experience Scale yielded a three factor solution which was stable, suggesting that this construct is multidimensional. Principal

Component Analysis (PCA) was used as the method of extraction and Varimax rotation with Kaiser normalization was used to obtain a more interpretable factor structure. The analysis yielded a three-factor solution using eigenvalues over 1 and an examination of the rotated component matrix.

The factor loadings indicated satisfactory item convergence within each component and most of the items are above the recommended value of .60, showing that the factor validity of the items is satisfactory. Factor loadings for Factor 1 varied from .621 to .820; Factor 2 ranged from .626 to .818; and Factor 3 ranged from .623 to .696, which were acceptable levels of item convergence within each factor. Factor 1 comprised items representing moral and social evaluation of vulgar content exposure, such as perceived harm, moral decline, social consequences, and the need for regulation and awareness. Factor 2 included items pertaining to active exposure behavior, such as purposeful viewing, searching, sharing and exposure to vulgar content on digital platforms. Factor 3 included items reflecting passive and algorithmic exposure, including accidental exposure, platform-driven exposure, and difficulty avoiding vulgar content. The three-factor structure exhibited good interpretability and conceptual distinctiveness, confirming that vulgar content exposure is a multidimensional construct, comprising moral evaluation, behavioral engagement and algorithmic exposure pathways.

Table 4: Reliability Statistics of the Vulgar Content Exposure Experience Scale

Scale/Subscale	Cronbach's Alpha	N of Items
Vulgar Content Exposure Experience Scale	.915	33
Cognitive-Moral Evaluation	.961	17
Active Behavioral Exposure	.905	11
Passive Algorithmic exposure	.820	5

The VCEES exhibited good internal consistency, evidenced by an overall Cronbach's alpha of .915 for 33 items, which is excellent. Cognitive-Moral Evaluation demonstrated very high reliability ($\alpha = .961$) with a good inter-item consistency, but with some item redundancy. Active Behavioral Exposure had excellent reliability ($\alpha = .905$) and Passive Algorithmic Exposure had acceptable reliability ($\alpha = .820$). Overall, the results indicate the psychometric soundness of the scale and its sub-dimensions.

Table 5: Correlations for Convergent Validity

		CM-E	VCEES
CM-E	Pearson Correlation	1	.564**
	Sig. (2-tailed)		<.001
	N	300	300
VCEES	Pearson Correlation	.564**	1
	Sig. (2-tailed)	<.001	
	N	300	300

** . Correlation is significant at the 0.01 level (2-tailed).

The convergent validity analysis revealed that there was a positive correlation between the Content-based Media Exposure Scale (CM-E) and the Vulgar Content Exposure Experience Scale (VCEES), $r = .564$, $p < .001$ ($N = 300$). The moderate correlation suggests that both instruments are related but not redundant, and that the VCEES measures a different, but theoretically similar, construct within the larger construct of vulgar content exposure. The result shows that the newly

developed scale has adequate convergent validity.

Discussion

The aim of the present study was to create and validate the Vulgar Content Exposure Experience Scale (VCEES) to investigate the multidimensionality of digital environment exposure experiences. The findings provide a preliminary evidence for the description of vulgar content exposure as a multi-layered psychological phenomenon that is shaped by cognitive evaluation, behavioral engagement, and algorithmic filtering. Vulgar content exposure is a structured process shaped by individual agency and platform architecture.

The Cognitive-Moral Evaluation dimension reflects the cognitive judgment about vulgar content, in terms of social norms, moral standards and perceived harm. Perceptual as well as evaluative judgements are suggested by this dimension as moral judgements and meaning-making in the social sphere becomes relevant. The high and stable loadings of this factor suggest that participants appeared to hold relatively stable cognitive schemas on the acceptability and consequences of vulgar content. This is consistent with Social Cognitive Theory which suggests that observational learning is dependent on cognitive appraisal processes that affect behaviour and the development of attitudes (Bandura, 2001). In a similar manner, according to the Cultivation Theory, the more time individuals spend with media, the more their image of what is acceptable or not in society is "cultivated" and over time certain forms of content may become normalized or problematized over time (Gerbner et al., 1986; Morgan & Shanahan, 2010). In this context, moral appraisal functions as a psychological filter through which digital content is evaluated and internalized.

The Active Behavioral Exposure dimension emphasizes purposeful exposure to obscene material. This means that exposure is not just incidental, but behaviourally driven, which means that individuals may seek, share, or consume such content. Theoretically, this is in line with Uses and Gratifications theory which suggests that the media user is not a passive recipient but an active agent who chooses the content according to psychological needs, curiosity, entertainment seeking, or motives for social interaction (Katz, Blumler, & Gurevitch, 1973). This indicates that, in digital environments, there are opportunities for user-initiated pathways of exposure, particularly in platforms with a system of personal feed and interactive engagement system. A high loading on this factor implies that the exposure patterns are consistent with each other and thus further validates a latent construct of "intentional exposure" psychometrically.

Passive Algorithmic Exposure dimension captures experiences of exposure that happens as a result of structural measures such as recommendation systems, automated feeds and incidental exposure to vulgar content. This dimension is particularly important in the context of today's digital ecosystems, where users are frequently shown content that they were not actively seeking or intending to view. Algorithmic systems prioritize engagement, which frequently means that viewers will be shown emotionally charged or sensational material, increasing the possibility of accidental exposure. This finding is consistent with other studies of algorithmic amplification and incidental exposure in social media environments, which have demonstrated that the design of social media platforms can influence exposure to content and that this exposure is not always under users' control (Bail et al., 2018; Montag & Hegelich, 2020). This factor is oriented towards the 'structural' dimensions of the impact of digital media, which suggests that the exposure to digital media does not only depend on the action of the user, but also on the design of the platform.

The three dimensions come together to suggest that vulgar content exposure is a multi-layered interactional process, rather than a single psychological trait. Cognitive-moral evaluation is an internal interpretive process, active behavioral exposure is intentional engagement, and passive

algorithmic exposure is environmental and technological influences. These dimensions provide a more sophisticated conceptualization of exposure experiences in the contemporary digital world, compared to traditional unidimensional measures of exposure.

The results of convergent validity also support the construct validity of the VCEES. The moderate positive correlation with an already established measure of exposure to vulgar content indicates that the scale developed is not just an indicator of how often the person is exposed to vulgar content, but also, in theory, consistent with other variables. This means that the VCEES covers other, more general, experiential, and interpretive components of exposure as opposed to conventional exposure measurement methods. This is what one expects to see in newly developed multidimensional scales, in which moderate correlation would be an indication of conceptual relatedness and construct expansion.

The causality in the relationship between the variables cannot be interpreted because of the cross-sectional design of the study. Further, the convenience sampling approach might restrict the ability to generalize to larger populations. Future research is warranted to validate the scale in other cultures and to examine its predictive value for psychological effects such as emotional regulation, desensitization, overload and behavioral adjustment in digital settings.

Conclusion

The VCEES had acceptable psychometric properties, with a stable three factor structure and good reliability. The scale measures exposure as a multi-dimensional phenomenon, which incorporates moral appraisal, behavioral involvement and algorithmic exposure. Overall, the instrument was determined as a valid instrument to assess the vulgar content exposure experiences in digital environments; however, it is suggested that it be validated in other samples.

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