

## **Biological Antecedents of Adult Content Consumption Among Young Adults: An Exploration By Grounded Theory**

**Beenish Mubeen and Mujeeba Ashraf**

University of the Punjab

Adult content consumption has increased globally with digital access, yet research from conservative societies such as Pakistan remains scarce, particularly regarding biological factors underlying this behavior. This qualitative study explored the biological drivers of adult content consumption among young Pakistani adults using a grounded theory approach. Twenty-seven participants aged 19–35 who reported viewing adult content at least once per month for six months participated in in-depth semi-structured interviews. Data were analyzed using open, axial, and selective coding. Biological antecedents identified in the analysis included menstruation, hormonal fluctuations, pubertal maturity, sexual arousal, unmet sexual needs, and masturbation-related motivations. Participants described these biological processes as triggers that heightened curiosity, intensified bodily sensations, or acted as compensatory mechanisms in the absence of culturally permissible sexual outlets. The grounded analysis generated a conceptual understanding of how these biological factors operate as precursors to adult content consumption within a socioculturally restrictive context. The study fills an important gap in indigenous literature and offers implications for sexual health education, culturally sensitive policy development, and future research exploring multidimensional antecedents of adult content consumption.

*Keywords.* Biological drivers, adult content consumption, pornography, sexuality, young adults, Pakistan, grounded theory

The rapid growth of online technology has significantly altered daily life, influencing communication, entertainment, education, and how individuals seek information. Among these changes, the

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Beenish Mubeen and Mujeeba Ashraf, Department of Applied Psychology, University of the Punjab, Lahore, Pakistan.

Beenish Mubeen, is now at, University of the Management and Technology, Lahore, Pakistan.

Correspondence concerning this article should be addressed to Beenish Mubeen, Department of Applied Psychology, University of the Punjab, Lahore, Pakistan. Email: beenishmubeen30@gmail.com

consumption of adult content via digital platforms has become more common, especially among young adults who are in a phase marked by curiosity, the development of identity, and the exploration of sexual norms (Attwood et al., 2018; Golemeeva, 2022). On a global scale, the availability of online explicit content—material showcasing sexual activities, nudity, or erotic visuals—has substantially increased, driven by smartphones, high-speed internet, and social media channels (Monaghan, 2017). Research shows that young adults are some of the primary consumers of digital sexual content, highlighting both their natural curiosity during development and the easy access to these materials (Nikkelen et al., 2020).

In Pakistan, online adult content consumption takes place within a socially conservative and religiously influenced context, where open discussions about sexuality are generally discouraged (Ehsan et al., 2019). Limited access to formal sexual education and culturally enforced restrictions on sexual expression have led to increased reliance on online platforms for sexual knowledge and experimentation. National surveys indicate widespread exposure despite these constraints: 62% of respondents reported accessing explicit content online, with smartphones serving as the primary medium (Digital Rights Foundation, 2016; Pakistan Telecommunication Authority [PTA], 2018). These findings demonstrate substantial engagement with online adult content, which may be underreported due to social desirability bias and prevailing taboos, highlighting the complexity of this phenomenon in the Pakistani context.

International research has primarily examined the psychological, behavioral, and social correlates of online explicit content consumption, such as compulsivity, mood disturbances, risky sexual behavior, and relationship difficulties (Lameiras et al., 2018; Setyawati et al., 2020; Wright et al., 2021). Additionally, a smaller body of literature has investigated personality traits, depressive symptoms, and impulsivity as predictors of digital sexual engagement (Cho & Auger, 2017; Mubeen et al., 2024).

In Pakistan, there is a lack of extensive research, with the majority of existing studies concentrating on prevalence, demographic patterns, and psychological factors (Ali et al., 2024; Mubeen & Ashraf, 2022; Naeem et al., 2021). Qualitative perspectives on the subject are notably limited, especially concerning how young adults perceive and engage with online adult content in the context of the country's sociocultural limitations.

Although, this research does not rely on an existing theoretical framework, but it is conceptually rooted in the bio psychosocial

viewpoint (Engel, 1977). This perspective acknowledges that human behavior is influenced by the interplay of biological, psychological, and social elements. Previous studies in Pakistan primarily focused on the psychological and social aspects of consuming explicit online content, such as mood, personality traits, coping mechanisms, and social influences (Mubeen & Ashraf, 2022; Naeem et al., 2021). Although these studies have yielded important insights into behavioral and social correlates, the biological factors remain largely unexamined, especially from a qualitative angle that reflects lived experiences within the Pakistani context.

This paper is investigated various antecedents of online consumption of explicit content. It specifically concentrates on the biological aspect as a distinct analytical component, enabling a comprehensive examination of how young adults perceive, interpret, and manage their biological impulses within a conservative sociocultural framework. By focusing on this under-explored dimension, the research fills a significant gap in the existing literature and offers a unique contribution to the understanding of online sexual behavior in Pakistan. Given the widespread nature of online explicit content and the lack of qualitative research on biological factors in Pakistan, this study is particularly important to provide an opportunity to generate culturally grounded insights.

### **Rationale**

The consumption of adult content among young adults is a substantial yet inadequately studied issue, especially in sociocultural environments where sexuality is heavily regulated and open discussions regarding sexual development are not encouraged. In Pakistan, sexuality is predominantly viewed through the lens of moral and religious standards, leading to a scarcity of opportunities for candid discussions, formal education, or scientific exploration of sexual development. This environment has impeded both public discourse and empirical research into the factors that influence young adults' engagement with adult content consumption. Most of the current research, on adult content consumption, both globally and within Pakistan, has concentrated on the outcomes and correlates rather than the underlying factors. International studies have mainly focused on the consequences, such as shifts in attitudes, compulsive behavior, or behavioral risks, frequently employing quantitative, outcome-driven methodologies.

Similarly, studies in Pakistan have mainly emphasized prevalence, demographic patterns, and psychological or social correlates. Although these studies provide valuable descriptive insights, they provide

limited explanations for why young people turn to adult content, especially in environments where socially acceptable avenues for sexual learning and expression are limited. Although the biological processes associated with sexual development are universal, their interpretation and regulation are shaped by cultural context. In Pakistan, young people are undergoing biological changes in a context characterized by limited sexual education, restrictions on expression, and social silence regarding physical development.

As a result, these experiences can be confusing, misunderstood, and fraught with uncertainty and hesitation. In such situations, online sexual content can provide people with an accessible way to interpret bodily sensations and regulate sexual tension. These subjective and situational processes cannot be adequately captured by standardized measures or predefined variables. Therefore, a qualitative approach is needed to develop an empirical understanding of biological antecedents in the Pakistani context. Qualitative approach allows participants to express their bodily experiences in their own words and explain how those experiences relate to their consumption of adult content. This approach is particularly suited to the study of private, culturally sensitive, and undertheorized phenomena, allowing influential biological factors to emerge inductively from participants' narratives rather than being imposed a priori.

This study fills a critical gap by qualitatively examining the biological antecedents of adult content consumption among Pakistani youth. By treating biological effects as a separate area of analysis and placing them within a conservative sociocultural context, this study provides a culturally grounded perspective that has been largely lacking in previous research. As one of the first qualitative studies of its kind in Pakistan, this study provides a framework for future research, education, and context-specific interventions.

## **Method**

### **Research Design**

An evolved grounded theory design was used (Corbin & Strauss, 2008). Grounded theory facilitates recording and interpreting individuals' subjective experiences and behaviors. Through the methodological process of theoretical sampling and constant comparison, it enables abstraction of individuals' subjective experience or behavior (Fendt & Sachs, 2008). Grounded theory was used to generate the factors to explain the behavior found in the data and uses the participant's personal experiences to explore the biological factors to understand the phenomenon being studied.

## **Sample**

Participants in the age range of 19 to 35 were included in the sample as young adults indulge more in adult content consumption and more curious about the sexual relationships as compared to other age groups. Forty young adults were filtered by snowball sampling strategy at first and later the sample of 27 participants was approached through purposive sampling strategy and only those participants included who had exposed adult content consumption once a month from at least six months. The participants having their electronic devices like laptops, computers, Smartphone, and etc. were included because they provide easy access adult material as compared to those who used to visit to internet cafes to consume adult content.

## **Measure**

The participant information was collected through a demographic information sheet and an interview guide was prepared for collecting the information about adult content consumption. An interview guide consisted of the following questions.

- Why do you consume adult content?
- What things force you to adult content consumption?
- What was going on in your life at the time you started adult content consumption?
- What was your experience in that situation?

## **Procedure**

Formal permission was obtained from the institution for data collection. A record of 40 young adults was collected through snowball sampling strategy those were consumed adult data. Then 27 young adults having the age range 19-35 both male and female were approached at their described meeting point by using a purposive sampling strategy. Both verbal and written consent was obtained from all the participants. Those participants were included who were agreed upon providing information about the consumption of explicit content on the internet and were assured about their confidentiality and privacy. The data was collected through interviews guide with in-depth in-person and telephonic interview and also recorded by getting their permission. The duration of each interview was approximately 30-45 minutes. After collecting the data all interviews were transcribed and analyzed by grounded theory. The transcriptions were

verified for accuracy and consistency by listening to the recording. The first author transcribed and analyzed the data line by line. The supervisor of the study re-evaluated the emerging codes and content.

## Results

The purpose of this qualitative study was to generate biological antecedents of adult content consumption by young adults. The demographic information of the participants was collected including age, education, relationship status, socioeconomic status, family system, and family environment of participants before collecting the concerned data of adult content consumption as shown in Table 1.

**Table 1:** *Descriptive Statistics of Respondents who Participated in the Current Study (N = 27)*

Variable	n (%)	Demographics	n (%)
Family			
Nuclear	18 (67)		
Joint	09 (33)		
Education			
Middle to F.A	2 (7)		
Graduation and Above	25 (93)	Residency	
Socioeconomic Status		Lahore	17 (62)
Upper class	5 (19)	Shahdara	1 (4)
Middle class	6 (22)	Kasur	2 (7)
Upper middle class	15 (55)	Peshawar	1 (4)
Family Environment		Gujranwala	3 (11)
Cohesive	17 (63)	Sahiwal	1 (4)
Criticizing	3 (11)	Karachi	1(4)
Open	7 (26)	Quetta	1(4)
<b>Variable</b>	<b>Mean</b>	<b>SD</b>	
Age	26.81	3.48	

Table 1 summarizes the demographic characteristics of the participants to provide contextual background for the qualitative findings. The sample consisted of young adults with a mean age of 26.81 years, age range relevant to biological maturation and sexual development. Most participants were highly educated and belonged to middle or upper-middle socioeconomic backgrounds, indicating regular access to digital media. Participants represented both nuclear and joint family systems, diverse family environments, and multiple urban and semi-urban regions of Pakistan. These characteristics situate the findings within varied yet comparable sociocultural contexts and are presented to enhance transparency rather than for statistical inference.

The data was analyzed following Corbin and Straus’s (2008) approach, incorporating open, axial, and selective coding. A comprehensive summary of the coding process and its results can be found in Table 2, which provides insights into the biological antecedents of adult content consumption.

**Table 2:** *Codes and Frequencies of Biological Antecedents of Adult Content Consumption Among Adults*

Open Coding	Axial Coding	<i>n</i>	Selective Coding	Theory Development
Relaxant During Periods				
Arousal Before Onset of Periods	Menstruation	8		
Distractor During Periods				
Hormonal Change After Periods				
Hormonal Fluctuations	Hormonal Changes	6		
Pubertal Age	Puberty	5	Biological Factors	Biological Antecedents of Adult Content Consumption
Sexual Maturity				
Physiological Changes During Arousal				
Physical Arousal and Satisfaction	Arousal and Satisfaction	11		
Sexual Urges		9		
Satisfaction of Needs	Sexual Needs			
Masturbation	Masturbation	12		

Table 2 presents the process of open, axial, and selective coding derived from the interview data. Multiple open codes were identified and subsequently grouped into axial codes, which were integrated under a selective code. This analytic process reflects participants’ descriptions of their experiences related to adult content consumption. The categories reported below are grounded in participants’ narratives and represent how biological experiences were perceived and managed within their everyday sociocultural environment. A conceptual model was generated from the data that illustrates the process of the phenomenon by showing a central category and subcategories related to it.

### **Categories and Sub-categories**

The selective code *Biological Factor* comprises several axial codes, including menstruation, hormonal changes, puberty, arousal, sexual needs, and masturbation. Participants described these biological experiences as occurring in a context where open discussion of bodily and sexual matters is limited. As a result, such experiences were often handled privately, with adult content consumption described as occurring in personal and concealed spaces. Each axial code is presented below using participants' verbatim accounts. These axial codes along with open codes are discussed below.

#### **Menstruation**

Menstruation emerged as a prominent biological experience influencing adult content consumption among female participants. Participants described this period as marked by bodily discomfort, emotional fluctuation, and heightened internal sensations. Within a cultural context where menstruation and related bodily experiences are rarely discussed openly, participants reported managing these changes privately. Verbatim supported these codes are given below:

#### ***Relaxant During Periods***

Female participants reported an increased inclination toward adult content consumption during menstruation. They associated this engagement with internal bodily changes occurring during this phase and described feeling more comfortable accessing such content privately during periods. One female participant said that "I view such content during periods because of hormonal changes and no fear of contamination I go towards adult content consumption during periods. Similarly, another female participant stated that my feelings and interest increase to consume adult content during my periods.

Some participants described adult content as having a calming effect during menstruation. They reported engaging with such content to cope with pain or discomfort and to soothe themselves during physically challenging days. As one participant narrated that I watch adult content because it lessened my pain during periods. Another female participant, stated that my condition got odd during my periods, so I view porn videos during my periods to calm down myself.

***Arousal Before Onset of Periods***

Participants also described experiencing heightened sexual urges in the days preceding menstruation. These experiences were often interpreted independently, with participants seeking explanations through online searches. A women participant reported that before two to three days of periods I use to experience sexual urges. I also search on google that due period there are hormonal changes that lead towards pornography consumption.

***Distractor During Periods***

Adult content was further described as a means of distraction during menstruation. Participants reported using such content to divert attention away from physical discomfort and bodily unease. One of the female participants said that as my condition got odd so to distract myself, “I view adult content during my periods. When I got my periods, my attention diverts towards it and I watch these videos”.

***Hormonal Changes After Periods***

Some participants reported experiencing increased urges following the completion of their menstrual cycle. These urges were described as internally driven and were linked to engagement with adult content.

One of the female participants stated that due to hormonal changes, I feel urged after my periodic cycle to consume the adult content. Due to hormonal changes after my periods, I go towards adult content consumption.

Overall, female participants described menstruation-related experiences as closely linked to private engagement with adult content, particularly within a sociocultural environment where such bodily changes are not openly discussed.

**Hormonal Changes**

The axial code comes under the biological factors is hormonal changes Hormonal changes were described by both male and female participants as a recurring bodily experience associated with adult content consumption. Participants portrayed these changes as sudden and difficult to regulate, particularly during young adulthood. Within a context where bodily and sexual changes are rarely discussed openly, participants reported experiencing these internal shifts privately. Verbatim supported these codes are given below:

### ***Hormonal Fluctuation***

Participants described hormonal fluctuations as creating repeated urges to view adult content. These urges were framed as internally driven and persistent, often occurring without conscious planning. One of the male participant reported that when we are young, there are hormonal changes that cause us to consume adult content. We watch it and enjoy consuming adult content. Similarly, another male participant said that, that due to hormonal changes, watching a movie once makes you want to watch it again and again.

Participants' narratives indicate that hormonal fluctuations were experienced as bodily changes that heightened engagement with adult content, particularly within private settings where such experiences could be managed discreetly.

### **Puberty**

The Next axial code is puberty that comes under the biological factors and further has multiple open codes like pubertal age and sexual maturity. Puberty emerged as a significant developmental phase associated with adult content consumption. Participants described this stage as a time of increased bodily awareness and emerging sexual sensitivity. These experiences were often reported as occurring without guidance or open discussion, particularly within families and educational settings. Verbatim supported these codes are given below:

#### ***Pubertal Age***

Participants reported that entering puberty was accompanied by noticeable physical changes and heightened curiosity. These bodily changes were described as drawing attention toward sexual content, especially during early adolescence.

One of the male participants reported that he is more likely to start consuming adult content at a younger age as he approaches puberty. He narrated as we enter in this phase, our sexual desires become more mature. We experience changes in our genitals. Then we use to consume it. Meanwhile, female, said that her age was the deciding factor in watching it. This is a time when people consume it out of necessity and because they want to see it.

### ***Sexual Maturity***

Participants further described sexual maturity as developing at an early age, which they associated with increased interest in adult content. These experiences were framed as occurring before individuals were socially permitted to act upon or openly express sexual feelings. One of the male participants stated that when you get sexually mature and want to have physical relationship at young age then you indulge in adult content consumption. Moreover, he stated people led towards content consumption at early age as now a day's people get sexually mature at very young age.

As per the above verbatim, participants narrated that sexual maturity and pubertal age due to early puberty is a leading factor of adult content consumption. Overall, participants portrayed puberty as a period marked by a mismatch between biological development and socially acceptable outlets, leading to private engagement with adult content.

### **Arousal and Satisfaction**

Arousal was described by participants as a bodily experience closely linked to adult content consumption. Both male and female participants reported that feelings of arousal were often accompanied by physical sensations that prompted engagement with adult content. These experiences were described as immediate and internally driven, occurring within private settings. Verbatim supported the open codes are given below:

### ***Physical Changes During Arousal***

Participants described bodily changes associated with arousal, which they perceived as prompting the viewing of adult content. These changes were experienced as physiological responses that required personal management.

A male participant reported that there are physical changes due to arousal that make him to watch such movies. The reason, we primarily watch adult content is because of these changes in our bodies during a state of arousal. On the other hand, a female participant reported that physiological changes occur suddenly, which lead to changes in her body, and that this arousal is the main reason for watching porn.

### ***Physical Arousal and Satisfaction***

Participants reported that feelings of physical arousal directly preceded their engagement with adult content. They described accessing such content as an immediate response to bodily sensations.

A female, reported that due to arousal whenever I feel myself physically aroused, I watch porn. A male participant reported that due to physical arousal I use to watch adultery content. Whenever I feel arousal then I use to open and watch it.

### ***Sexual Arousal and Satisfaction***

Sexual arousal was described as creating a perceived need for release or satisfaction. Participants, particularly those who were unmarried, described adult content as a privately accessible option in response to these sensations.

A male participant narrated that whenever I feel aroused sexually then I needs something. I am not married so I go towards adult content consumption whenever I feel aroused. Another male participant, reported that when I felt sexual changes within me, then I started watching it and felt satisfied. For me the main factor of consuming adult content is sexual arousal. Participants reported and above verbatim also shows that physical and sexual arousal lead people to consume adult content.

### **Sexual Needs**

Next axial code comes under the biological factors is sexual needs that further have multiple open codes. Sexual needs were described by participants as basic bodily experiences that required fulfillment. Participants framed these needs as emerging naturally during young adulthood but reported limited socially acceptable means to address them. Within this context, adult content consumption was described as a privately accessible option. Verbatim supported these codes are given below:

### ***Sexual Urges***

Participants reported experiencing sexual urges that they perceived as unmet. These urges were described as persistent and internally driven, contributing to engagement with adult content.

A male participant reported that I asked from two to three boys that do you watch these videos then they said our sexual urges did not fulfill, these sexual urges lead towards adult content consumption. On the other hand, a male narrated that sex is the basic biological need according to Maslow's hierarchy. Then to fulfill these desires we go towards adult content consumption.

### *Satisfaction of Sexual Needs*

Participants described adult content as a means of addressing sexual needs when other options were unavailable. This was reported by both male and female participants.

A male participant reported, whenever I feel sexually aroused then a person needs something that could satisfy him I watch this content to satisfy my needs. Mostly people watch these videos for sexual satisfaction. Similarly, another male participant reported that that it is the primary factor and being an adult sex is one of our basic needs. Then a person consumes adult content to satisfy his basic biological need. Lastly a female said that I also use to watch this stuff to satisfy my sexual need and sexual arousal because there is no other alternative.

Above mentioned verbatim showed that both males and females agreed that one of the leading factors for adult content consumption is sexual need and satisfaction of those needs. In contrast to previous literature where sexual needs have not been discussed because none of the research is conducted indigenously on antecedents or correlates of adult content consumption. Here are the restrictions on the pre-marital physical relationships they find adult content most appropriate alternative for the fulfillment of their sexual needs.

### **Masturbation**

Last axial code comes under the biological factors is Masturbation. Both male and female participants stated that one of the reasons of adult content consumption is masturbation that is an alternate source for the fulfillment of their desires and fantasies. They reported that whenever they have to masturbate, they watch adult content, and they find it too compelling. Verbatim supported this code are given below:

A female participant stated that girls and boys often masturbate and when they search about it is dangerous, or it is good then you find out that it is good health. It is good for the normal person then people

go for adult content consumption. On the other hand, a male participant narrated that when I came to know about masturbation as a source of pleasure but for that you must come into that state where you can feel that stuff. So, for this stuff I get to know about adult content consumption for masturbation. I relate adult content consumption with masturbation. I watch it when I must masturbate. At this age we do not have any other source for masturbation rather than adult content consumption.

There were both males and females' interviewees who correlated masturbation with adult content consumption. Across all axial codes, participants described biological experiences related to bodily development, arousal, and sexual regulation that were managed in personal space. Although the biological experiences identified in this study are universal in nature, participants' narratives reveal that their management and expression are shaped by Pakistan's sociocultural context. Particularly, involvement in adult content related to menstruation, unassisted pubertal exploration, and sexual needs unmet due to premarital restrictions reflects a culturally specific context of silence, moral regulation, and limited sex education. These results demonstrate how biological experiences are personally transmitted in conservative social environments. These experiences are described as personal and internal, occurring within a broader context in which open discussion of sexuality is restricted. The grounded theory analysis resulted in conceptual insights derived directly from the participants' narratives.

## **Discussion**

The present study explored biological antecedents of adult content consumption among young adults in Pakistan using a grounded theory approach. The findings indicate that biological experiences—menstruation, hormonal changes, puberty, arousal, sexual needs, and masturbation—play a meaningful role in shaping engagement with adult content. While these biological processes are common across cultures, participants' narratives reveal that their expression and regulation are deeply influenced by Pakistan's sociocultural environment, where open discussion of sexuality remains limited.

A particularly noteworthy finding of this study is the role of menstruation in shaping adult content consumption among female participants. Existing research demonstrates that women's sexual interest and responsiveness vary across the menstrual cycle, with fluctuations linked to changes in estrogen and progesterone levels

(Marcinkowska et al., 2023; Shirazi et al., 2018). Studies have shown that women may experience increased attention to sexual cues and heightened sexual interest during specific phases of the cycle.

What distinguishes the present findings is not the biological mechanism itself, but the cultural context in which menstruation-related changes are experienced. In Pakistan, menstruation is often treated as a private and stigmatized bodily process, with limited opportunities for discussion or education (Ali & Rizvi, 2010; Tiwana & Raheel, 2023). Female participants described coping with menstrual discomfort, emotional changes, and heightened bodily awareness in isolation. Within this context, adult content emerged as a private means of managing or making sense of these sensations. This suggests that cultural silence surrounding menstruation may intensify reliance on private digital content during hormonally sensitive periods.

Participants also identified hormonal changes as a recurring trigger for adult content consumption. This finding is consistent with a substantial body of biological and behavioral research linking sex hormones—particularly testosterone and estrogen—to libido and sexual motivation (Bancroft, 2005). Hormonal influences on sexual desire have also been associated with increased attention to sexual stimuli and engagement with sexually explicit material (Chivers, 2017).

In the Pakistani context, participants reported limited understanding of these hormonal changes due to the absence of formal sexual education. Research suggests that when young people lack explanatory frameworks for bodily changes, they may turn to media sources for information, including sexually explicit material (Peter & Valkenburg, 2016). Thus, while hormonal fluctuations are biologically universal, the lack of culturally appropriate guidance appears to shape how these urges are interpreted and managed.

The findings related to puberty and early sexual maturity are consistent with prior literature indicating that pubertal development is associated with increased sexual curiosity and exploration (Harden et al., 2018). Adolescents who experience early physical maturation often report heightened sexual awareness before acquiring sufficient cognitive or social resources to regulate these changes (Baams et al., 2015).

In Pakistan, early pubertal development often occurs in the absence of structured sexual education or open family communication (Ali et al., 2025). Participants described a mismatch between biological readiness and socially sanctioned sexual expression, leading them to seek information or relief through adult content. This aligns

with research suggesting that restrictive sexual norms may increase adolescents' reliance on mediated sexual content as an alternative source of sexual knowledge (Peter & Valkenburg, 2016).

Sexual and physical arousal emerged as immediate bodily triggers for adult content consumption. Extensive research supports the association between arousal states and engagement with sexually explicit material, particularly as a means of regulating sexual tension or enhancing stimulation (Vogels & Sullivan, 2019). Neurobiological models of sexual response emphasize that arousal increases attentional focus on sexual cues, making explicit content more salient (Strahler et al., 2019).

In this study, arousal-driven consumption was particularly salient among unmarried participants, reflecting cultural restrictions on premarital sexual relationships. Similar patterns have been observed in conservative cultural and religious contexts, where limited opportunities for partnered sexual activity increase engagement in solitary sexual behaviors mediated by digital content (Grubbs et al., 2017).

Sexual needs were described by participants as basic biological drives that intensified during young adulthood. Empirical research has shown that unmet sexual needs may contribute to compensatory behaviors, including increased pornography use. In Pakistan, strict norms surrounding premarital intimacy and delayed marriage limit socially acceptable avenues for sexual expression (Faisal et al., 2022; Mansab, 2024). Participants framed adult content consumption as a pragmatic alternative for managing unmet sexual needs within these constraints.

The association between adult content consumption and masturbation identified in this study is well supported by existing literature. Masturbation has consistently been identified as a common context in which pornography is used, particularly among young adults (Carvalho et al., 2015; Prause, 2019). Pornography may facilitate arousal, fantasy, and perceived sexual release, especially in contexts where partnered sexual activity is restricted.

Participants' accounts also reflected moral ambivalence surrounding masturbation, shaped by limited sexual literacy and conflicting cultural and religious messages. Research in Muslim-majority societies suggests that such ambiguity often leads individuals to seek information online, where adult content may be encountered unintentionally or used deliberately for clarification (Yilmaz, 2025).

Taken together, the findings demonstrate that biological antecedents of adult content consumption among Pakistani young

adults operate within a socioculturally restrictive framework. While biological processes such as hormonal changes, arousal, and sexual development are universal, their translation into behavior is culturally contingent. In contexts where sexuality is silenced or morally regulated, biological experiences are managed privately, increasing reliance on adult content as a concealed outlet.

From a grounded theory perspective, this study contributes an indigenous understanding of how biological antecedents function as precursors to adult content consumption in Pakistan. These findings highlight the importance of culturally sensitive sexual health education that addresses biological development without violating sociocultural norms. Future research may further examine how biological, psychological, and sociocultural factors interact over time to shape adult content consumption patterns in conservative societies.

### **Limitations and Suggestions**

The availability and accessibility of the sample population have posed a challenge in obtaining the representative sample. Data were based on self-reported narratives on a culturally sensitive topic, which may have been influenced by social desirability or selective disclosure. As a qualitative grounded theory study, the findings are context-specific and not intended for statistical generalization. Future studies may employ quantitative or mixed-method designs to examine the relative contribution of multiple factors. Longitudinal research could further explore how these influences interact over time.

### **Implications**

The research indicates that the biological factors influencing adult content consumption are influenced by the restrictive sociocultural context in Pakistan. The results highlight the importance of implementing culturally relevant sexual education, enhancing digital literacy programs, and providing well-rounded mental health support. By developing local insights, the study aids in decreasing stigma and fostering informed conversations about sexual development.

### **Conclusion**

This study provides an exploratory understanding of biological antecedents of adult content consumption among Pakistani young adults. The findings suggest that biological experiences influence

engagement with adult content; however, these processes are shaped by a restrictive sociocultural environment. The study contributes culturally grounded insights and offers a foundation for future research and educational efforts.

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