







# Online and Offline Pornography Consumption in Colombian Adolescents

## Consumo de pornografía on-line y off-line en adolescentes colombianos

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### ABSTRACT

Mass media consumption has increased markedly in recent years. One unintended consequence of this increase is the proliferation of risky consumption, including online and offline pornography. Although the literature has noted a series of predictive variables (age, gender, ethnicity, socioeconomic status, and family structure), recent studies have suggested including values and lifestyles as relevant factors in consumption decisions. The objective of the present study was to examine whether adolescents' lifestyles were relevant predictors of the consumption of pornography both on the Internet and in magazines or videos. A cross-sectional observational study design that included a representative sample of 9,942 Colombian adolescents ( $M_{age}=14.93$ ,  $SD=2.47$ ) was used. To control the effects of sociodemographic, structural, and individual variables, their lifestyles were examined using a multiple regression analysis and mediation analysis. The results indicated that a positive intrafamilial style was associated with a reduction in the consumption of pornography; however, both a negative intrafamilial style and a relational independence style increased consumption. In addition, the study suggests that family relational styles can mediate the relationship between positive values and risky behavior both online and offline. Finally, we discuss the results from the relational perspective, including its application in media literacy programs.

### RESUMEN

El consumo de medios de comunicación se ha incrementado notablemente en los últimos años. Una consecuencia no deseada de ello es la proliferación de consumos de riesgo, como es el caso de la pornografía on-line y off-line. Aunque la literatura ha señalado una serie de variables predictoras (edad, género, etnia, nivel socioeconómico o estructura familiar), estudios recientes han sugerido incluir los valores y los estilos de vida como factores asociados a las decisiones de consumo. El objetivo del presente trabajo fue examinar si los estilos de vida relacionales de los adolescentes son predictores relevantes del consumo de pornografía tanto en Internet como en revistas o vídeos. Se empleó un diseño observacional transversal que incluyó una muestra representativa de 9.942 adolescentes colombianos ( $M_{edad}=14,93$ ,  $DT=2,47$ ). Los estilos de vida, controlando el efecto de variables socio-demográficas, estructurales e individuales, fueron sometidos a un análisis de regresión múltiple y a un análisis de mediación. Los resultados indicaron que el estilo intrafamiliar positivo estuvo asociado con una reducción en el consumo de pornografía, sin embargo, tanto el estilo intrafamiliar negativo como el de independencia relacional incrementan el mismo. Además se propone que los estilos relacionales familiares pueden mediar la relación entre los valores positivos y el comportamiento de riesgo on-line y off-line. Finalmente, se realiza una discusión de los resultados desde la perspectiva relacional y su aplicación en programas de educación mediática.

### KEYWORDS | PALABRAS CLAVE

Internet, pornography, adolescents, lifestyles, values, family, leisure.  
Internet, pornografía, adolescentes, estilos de vida, valores, familia, tiempo libre.



## 1. Introduction

Information and communications technology (ICT) has changed the way people communicate and consume because they have easy access to new experiences, regardless of their gender and socioeconomic status (Mascheroni & Ólafsson, 2014). This boom has led to a growth in virtual experiences that, in some cases, may involve risky consumption or involuntary interaction with pornographic sites (Livingstone & al., 2014).

Although it is a controversial argument that has not yet achieved consensus, some studies and social policies argue that it is important to reduce the consumption of pornography online and offline among children and adolescents (Byron, 2010). For this reason, and having taken into account the studies that have addressed the subject using personality (Williams & al., 2009) or sociodemographic (McKee, 2007) data as predictor variables, as well as the studies that have recommended incorporating feelings and interests linked to specific behaviors to analyze consumption, in this study we analyzed the phenomenon using lifestyle theory. In addition to contributing to scientific knowledge, the results may be useful for the analysis of the needs and target audiences of prevention programs and media literacy education, increasing their efficiency and effectiveness.

### 1.1. Pornography consumption: predictive factors

Research has shown that the consumption of pornography may be linked to increased violent behavior, increased substance abuse and depression, and low levels of emotional ties to the primary caregiver (Ybarra & Mitchell, 2005; Kingston & al., 2008; Vega & Malamuth, 2007). Regarding the sociodemographic variables that moderate the consumption of pornography, the literature has mainly analyzed the effects of gender, age, ethnicity, family structure, and socioeconomic status, although in some of these studies, the results have contrasted (Wright, 2013).

Men consume more pornography than women (Ybarra & Mitchell, 2005), as do adolescents (Sabina, Wolak, & Finkelhor, 2008), especially from 13 or 14 years of age onward. Some studies have controlled for the association between ethnicity and consumption (Lambert & al., 2012), showing that it has a minimal impact on the use of pornography (Williams & al., 2009).

Regarding family structure, Rodrigo and al. (2006) have noted that adolescents with healthier lifestyles belong to 2-parent families (see also, for example, findings that the 2-parent family structure is related to the

reduction of risky behaviors among youth) (Cabrera & al., 2014). With regard to the relationship between socioeconomic status and the consumption of pornography, it has been shown that adolescents from families from higher socioeconomic strata use pornography more frequently (Luder & al., 2011).

One factor that influences consumption decisions is values (Kahle & Chiagouris, 1997), defined as general, systematic, deep, and durable (though modifiable) convictions on the social acceptability of certain actions, which are transmitted through the process of socialization. Although values imply guidance for social action (Cook & al., 2012), some studies suggest that the relationship between values and social action is mediated by lifestyles (Brunsø, Scholderer, & Grunert, 2004). Lifestyles can be defined as a complex, integrated system that is dynamic in terms of behaviors, guidelines, resources, and knowledge structures developed through experience that are expressed in personal and social identity (Archer, 2012; Bravo & Rasco, 2013; Faggiano, 2007; Thirlaway & Upton, 2009). Lifestyles are built by adolescents in a specific context of socialization that influences their thoughts and decisions, given that social interactions shape lifestyles and influence the selection and impact of media content (Bagdasarov & al., 2010).

Among the most significant factors in shaping lifestyles are relationships with friends, relationships with family, and leisure activities, especially those related to media consumption (Faggiano, 2007). Intra-familial relations and relationships with friends are key to the development of lifestyles (Hendry & al., 2003; Archer, 2012) and the social and emotional development of children (Ispa & al., 2013; Stacy, Newcomb, & Bentler, 1991).

Parenting style (Cabrera & al., 2014; Osorio & al., 2009; Kirsh, 2010; Wisenblit & al., 2013) and the type of family communication (Johnsson-Smaragdi 1994) moderate the type of consumption and impact that the media has on adolescents. Positive family relationships reduce the likelihood to engage in problematic behaviors online (Noll & al., 2013). Measures of intergenerational relationship quality, such as dialogue and participation in the familial processes of adolescents within their families (Currie & al., 2004), are important for the prevention of risky behaviors (Corrado & Freedman, 2011).

The peer group is a normative model for adolescents (Cheung & al., 2001) and therefore is a fundamental agent of socialization (Johnsson-Smaragdi 1994), influencing online consumption (Hargrave & Livingstone, 2006; Steele & Brown, 1995), behaviors,

values, and social and cultural identity (Currie & al., 2004). In relation to the time dedicated to media consumption, a recent study has shown that consistent computer use (more than 10 hours per week) is associated with the consumption of pornography (Mattebo & al., 2013). However, it is unclear whether it is intentional or accidental consumption. Therefore, it is important to control for other predictors.

## 2. Objectives

The main aim of this study, based on lifestyle theory (Faggiano, 2007) and in a relational perspective that considers social actors' decisions to be an emergent phenomenon of the interactive process of socialization (Archer, 2012), was to provide an analysis of the factors associated with the consumption of pornography among adolescents. To that end, we tested the following hypotheses:

- a) Relational lifestyles predict the consumption of risky Internet content.
- b) Relational lifestyles mediate the relationship between adolescents' values and their consumption of pornography.

## 3. Method

### 3.1. Participants and design

The present study featured a probabilistic, multi-stage, stratified sample, with a random selection of 9,942 adolescent students in Colombia between 13 and 18 years of age ( $M_{age}=14.93$ ,  $SD=2.47$ ), of whom 5,111 (53.52%) were female. To define the sample of the study, we used the base of 2012 projections of the main population, selecting cities with a population greater than 75,000 inhabitants. This selection resulted in 60 cities grouped into six regions, which permitted a representation of the different geographical zones in the country. The students were contacted via randomly selected schools. The selection of the schools to survey was performed such that the schools selected in the sample have a distribution that is similar to the whole. A total of 150 schools participated (67 public and 83 private), of which 11 had gender-segregated schooling (2 male and 9 female), 72 were secular, and 78 were religious. Those charged with data collection were professionals from the

company Cifras y Conceptos, who went to the educational institutions, contacted the directors, and obtained the students' informed consent for participation. The students completed a semi-structured survey in which they responded to a series of questions related to their lifestyles, values, activities, family, friends, and school. The data analysis was conducted using the SPSS statistical software package.

### 3.2. Predictor variables

#### 3.2.1. Sociodemographic variables

Age was measured with 1 item: «How old are you?». The response options for this item were from

**The promotion of healthy lifestyles (and ICT usage) should include daily decision-making training, even in aspects that initially do not seem related to media consumption. Finally, the relevance of family role models is clear, given that they are the foundation for the construction of harmonious lifestyles.**

12 to 19 years. Gender was coded as a «dummy» variable, where males received a 1 and females 0. The ethnicity of the adolescents was collected based on 5 categories (mestizo, indigenous, Afro-Colombian, white, and none).

#### 3.2.2. Structural variables

Family structure was measured using 3 categories, according to the responses to the following item: «In my house I live with: mom, dad, sibling(s), grandparents, and others». The categories were marked in terms of the absence or presence of parents in the family. Specifically, the first level of family structure comprised participants who lived with other people who were not their parents (e.g., grandparents, siblings, peers, etc.), the second level those who lived with 1 of the 2 parents, and the third level those who lived with both parents. In addition, the adolescents were categorized into 5 levels of socioeconomic status according to the labor activity of their parents (1 = «low socioeconomic status» to 5 = «high socioeconomic status») (for a similar codification of socioeconomic status, see EU Kids Online, Livingstone & Haddon,

2009; Jiménez & al., 2013).

### 3.2.3. Individual variables

The values were measured using six 5-point Likert-type items (1=«not at all important», 5=«very important»). They were asked how important they considered each of the following statements: «Being a just and loyal person», «Having a family», «Respecting authority», «Living a morally dignified life», «Being helpful and showing tolerance and respect to others», and «Being brave, able to risk myself before other things» (for a similar list of values, see Wilson and al., 2005; Experiment 3). Responses to these 6 items were highly intercorrelated ( $\alpha = .95$ ) such that an indicator index of adolescent values was formed.

### 3.2.4. Relational variables

A total of 63 items about media consumption and interactions with groups of friends and family that were representative of the lifestyles of the adolescents (see Table 1) were included in the analysis.

The format of the response was a 5-point Likert-type scale ranging from 1 (Nothing/Never) to 5 (A lot). Number of factors to extract (5) was decided based on the scree plot (Cattell, 1966). Afterwards, an exploratory factor analysis (EFA) was conducted on the total

Table 1. Factor loadings of each item, and correlation between factors

|                                  | Positive intrafamilial style | Negative intrafamilial style | Positive mediation style | Relational independence style | Relational marginalization style |
|----------------------------------|------------------------------|------------------------------|--------------------------|-------------------------------|----------------------------------|
| Help-family                      | .747                         | .016                         | .272                     | .061                          | -.355                            |
| Mom-understanding                | .440                         | -.100                        | .338                     | .034                          | -.114                            |
| Mom-importance                   | .416                         | -.131                        | .339                     | .046                          | -.115                            |
| Mom-relation                     | .605                         | .197                         | .209                     | .106                          | -.323                            |
| Mom-affection                    | .290                         | -.068                        | .195                     | .048                          | -.102                            |
| Dad-relation                     | .498                         | .231                         | .352                     | .083                          | -.241                            |
| Dad-affection                    | .284                         | .006                         | .212                     | .057                          | -.118                            |
| Parents-relation                 | .483                         | .243                         | .208                     | .097                          | -.234                            |
| Caretaker-relation               | .368                         | .177                         | .153                     | .110                          | -.236                            |
| Others-affection                 | .416                         | .340                         | .125                     | .199                          | -.283                            |
| Family-project                   | .403                         | .179                         | .132                     | .090                          | -.326                            |
| Family-future                    | .351                         | .207                         | .104                     | .095                          | -.316                            |
| Family-freedom                   | .280                         | .155                         | .078                     | .142                          | -.224                            |
| Family-conversation              | .722                         | .075                         | .263                     | .063                          | -.324                            |
| Family-decisions                 | .723                         | .085                         | .274                     | .065                          | -.312                            |
| Family-time                      | .700                         | .080                         | .263                     | .061                          | -.292                            |
| Family-love                      | .659                         | .038                         | .246                     | .092                          | -.326                            |
| Climate-love                     | .740                         | .091                         | .267                     | .073                          | -.326                            |
| Climate-brotherly                | .716                         | .135                         | .268                     | .091                          | -.352                            |
| Climate-tolerant                 | .642                         | .186                         | .229                     | .076                          | -.294                            |
| Climate-loyal                    | .645                         | .177                         | .234                     | .105                          | -.315                            |
| Climate-respectful               | .681                         | .103                         | .224                     | .075                          | -.297                            |
| Climate-confidence               | .559                         | .218                         | .182                     | .102                          | -.271                            |
| Family-abuse                     | .087                         | .319                         | -.014                    | .085                          | -.129                            |
| Family-physical violence         | .138                         | .893                         | -.039                    | .134                          | -.212                            |
| Family-verbal violence           | .045                         | .856                         | -.069                    | .142                          | -.194                            |
| Family-vengeful                  | .142                         | .818                         | -.028                    | .138                          | -.202                            |
| Family-solitary                  | .165                         | .601                         | -.030                    | .090                          | -.157                            |
| Family-conflicts                 | .046                         | .498                         | -.046                    | .158                          | -.405                            |
| Family-impulsiveness             | .273                         | .303                         | .053                     | .192                          | -.291                            |
| Friends-escape-route             | .162                         | .241                         | .074                     | .131                          | -.149                            |
| Smoking/Drinking-escape-route    | .025                         | .312                         | -.002                    | .271                          | -.055                            |
| Activities-escape-route          | .181                         | .213                         | .069                     | .084                          | -.096                            |
| Dad-homework                     | .178                         | -.013                        | .129                     | -.050                         | -.124                            |
| Dad-importance                   | .220                         | -.019                        | .785                     | .081                          | -.077                            |
| Dad-understanding                | .286                         | -.040                        | .910                     | .071                          | -.081                            |
| Dad-support                      | .273                         | -.061                        | .922                     | .082                          | -.093                            |
| Siblings-importance              | .165                         | .025                         | .222                     | .005                          | -.074                            |
| Boy/girlfriend-importance        | .019                         | .149                         | .025                     | .156                          | -.027                            |
| Acquaintances-importance         | .137                         | .064                         | .113                     | .194                          | -.096                            |
| Classmates-importance            | .166                         | .044                         | .123                     | .140                          | -.097                            |
| Friend-Group-importance          | .045                         | .020                         | .063                     | .265                          | -.064                            |
| Friends-support                  | .178                         | .035                         | .087                     | .186                          | -.133                            |
| Friends-sexuality                | .031                         | .211                         | -.015                    | .273                          | -.078                            |
| Friends-escape route             | .044                         | .176                         | -.031                    | .222                          | -.107                            |
| Friends-joint plans              | .159                         | .100                         | .046                     | .202                          | -.115                            |
| Friends-sports                   | .178                         | .140                         | .123                     | .139                          | -.086                            |
| Internet-week                    | -.020                        | .125                         | .005                     | .635                          | -.037                            |
| Internet-weekend                 | .007                         | .096                         | .019                     | .680                          | -.012                            |
| Music-movies                     | .046                         | .055                         | .075                     | .285                          | -.081                            |
| Online-gaming                    | .102                         | .102                         | .094                     | .133                          | -.054                            |
| Skype/Facebook/Chat              | .025                         | -.010                        | .022                     | .383                          | -.050                            |
| Twitter                          | .045                         | .073                         | .058                     | .333                          | -.067                            |
| SNS-week                         | -.020                        | .115                         | -.021                    | .754                          | -.039                            |
| SNS-weekend                      | -.002                        | .102                         | -.010                    | .789                          | -.026                            |
| TV-week                          | .068                         | .124                         | .010                     | .269                          | -.050                            |
| TV-weekend                       | .071                         | .098                         | .031                     | .274                          | -.036                            |
| Family-not-safe-space            | .355                         | .102                         | .116                     | .114                          | -.736                            |
| Family-not-unit                  | .454                         | .041                         | .163                     | .107                          | -.791                            |
| Family-not-learning              | .405                         | .120                         | .149                     | .109                          | -.839                            |
| Family-not-help                  | .442                         | .096                         | .171                     | .113                          | -.856                            |
| Family-not community             | .296                         | .238                         | .094                     | .124                          | -.719                            |
| Family-not-sustaining            | .185                         | .346                         | .037                     | .159                          | -.600                            |
| Positive-intrafamilial-style     |                              | .160                         | .386                     | .140                          | -.425                            |
| Negative-intrafamilial-style     |                              |                              | -.039                    | .241                          | -.241                            |
| Positive-mediation-style         |                              |                              |                          | .100                          | -.121                            |
| Relational-independence-style    |                              |                              |                          |                               | -.158                            |
| Relational-marginalization-style |                              |                              |                          |                               |                                  |

sample (N=8,685). The method of estimation was maximum likelihood (ML), given that the indices of

skewness and kurtosis did not indicate a strong deviation from normality (table 1). According to the theoretical framework, we selected oblique rotation as the method for the factor rotation due to the expectation of finding correlations among factors. The results indicated that the 5 factors extracted accounted for 32.72% of the variance of the test (for factor loadings, see table 1). The internal consistency of the total scale was high ( $\alpha=.89$ ), leading us to consider that the instrument is reliable. The factor rotation structure is theoretically relevant (Corcuera & al., 2010; Faggiano, 2007), and its composition is presented in table 2.

The composition of the first factor shows positive intrafamilial communication, the second the opposite situation (violent family), the third a climate of positive dialogue between adolescents and their parents, the fourth a socialization context external to the family that is greatly relevant to decision-making, and the fourth the impossibility of counting on affective and material support from one's own family. The means of each of these factors (intrafamilial communication, intrafamilial violence, paternal support, use of media, familial exclusion) were retained as five different predictor variables to be employed to compute stepwise regressions.

### 3.3. Criterion variable

**Pornography consumption.** The risky consumption on the Internet was measured using 4 items related to the consumption of pornography and erotic images and videos both on- and offline. The items asked about the frequency of occurrence, and the response options ranged from 1 (never) to 5 (always). The items were the following: «I search for erotic or pornographic images and/or videos», «I search for pictures and videos of models (like Natalia Paris, David Beckham, etc.)», «I accidentally find myself on a page with sexual or pornographic content», and «I watch pornographic movies (Playboy, Venus, etc.)». The internal consistency of these 4 items was moderately high ( $\alpha=.68$ ), and thus were averaged to create a composite index of pornography consumption.

## 4. Results

### 4.1. Pornography consumption

To test the first hypothesis, a hierar-

chical multiple linear regression analysis was conducted, as recommended by Aiken and West (1991). The criterion variable (i.e., the index of pornography consumption) was predicted based on the predictor variables. In the first block, the sociodemographic variables (age, gender, and ethnicity) were introduced. In the second block, the structural variables (socioeconomic status and family structure) were introduced. In the third block the individual variables (i.e., values) were introduced. Finally, in the fourth block, the lifestyle variables (see table 3 for the regression coefficients) were introduced. The first block explained 10.1% of the total variance in the consumption of pornography ( $R^2=.101$ ,  $p<.001$ ). The second block did not add any information ( $\Delta R^2=.0004$ ,  $p=.26$ ). The third block explained a significantly larger portion of the variance than the second block ( $\Delta R^2=.005$ ,  $p<.001$ ). Finally, the fourth block explained 17.4% of total variance in pornography consumption ( $R^2=.174$ ,  $p<.001$ ). The difference in the  $R^2$  values between blocks was statistically significant ( $\Delta R^2=.068$ ,  $p<.001$ ). In the first block concerning sociodemographic variables, the regression analysis indicated a significant main effect of age,  $\beta=.032$ ,  $t(6558)=6.274$ ,  $p<.001$ . In addition, a significant main effect was found for the variable of gender, which is consistent with the prediction of the literature,  $\beta=.383$ ,  $t(6558)=26.331$ ,  $p<.001$ . Male teens ( $M=1.71$ ,  $SD=.72$ ) consume more pornography than female teens ( $M=1.33$ ,  $SD=.49$ ). The effect of ethnicity was not significant ( $\beta=-.002$ ,  $p=.6$ ). In the second block, neither socioeconomic status ( $\beta=.004$ ,  $p=.39$ ) nor family structure ( $\beta=-.017$ ,  $p=.17$ ) had a significant impact on the consumption of pornography. In the third block, the variable of values showed a main effect on pornography consumption,  $\beta=-.038$ ,  $t(6558)=-5.799$ ,  $p<.001$ , indicating that pornography consumption decreases as participants have more values. In the fourth block con-

Table 2. Factor composition

| Factor                           | Number of items | Internal consistency | Examples of items  |
|----------------------------------|-----------------|----------------------|--|
| Positive intrafamilial style     | 23              | $\alpha=.90$         | «I am satisfied with the help I get from my family when I have problems», «I am satisfied with the time my family and I spend together»                        |
| Negative intrafamilial style     | 10              | $\alpha=.78$         | «Have I suffered some type of sexual abuse committed by someone in my family?», «My family is physically violent»  |
| Positive mediation style         | 5               | $\alpha=.74$         | «I can count on my dad in difficult moments», «My relation with my father is important to me»  |
| Relational independence style    | 7               | $\alpha=.74$         | «I log onto Skype, MSN Messenger, Gtalk, Facebook Chat, or chat rooms in general», «My group of friends is my preferred source of information about sexuality» |
| Relational marginalization style | 6               | $\alpha=.89$         | «My family is not a place of mutual and unconditional help», «My family is not a provider of economic resources»   |

cerning lifestyles, a main effect was found for positive intrafamilial relations,  $\beta = -.082$ ,  $t(6558) = -6.010$ ,  $p < .001$ . If these relations are positive, pornography consumption decreases. The opposite was found for the negative intrafamilial relations style,  $\beta = .154$ ,  $t(6558) = 11.571$ ,  $p < .001$ : consumption of pornography increases in contexts of violent socialization. In addition, a significant main effect was observed for the relational independence style,  $\beta = .241$ ,  $t(6558) = 16.126$ ,  $p < .001$ . No significant effect was observed for the positive mediation style ( $\beta = -.011$ ,  $p = .17$ ) or the relational marginalization style ( $\beta = -.009$ ,  $p = .25$ ).

#### 4.2. Mediation

To test the second hypothesis, a multiple mediation analysis was conducted with 2 mediators operating in parallel. The positive and negative intrafamilial lifestyles were submitted to a parallel mediation analysis aimed at exploring whether these lifestyles mediated the relationship between adolescents' values and their decision to consume pornography. The bootstrapping procedure recommended by Hayes and Preacher (2013) was used with the macro process packet of the SPSS program (Model 4, multiple mediators in parallel). First, the direct effect of the values on the consumption of pornography was significant,  $\beta = -.05$ ,  $t(8625) = -9.153$ ,  $p < .001$ . Second, the effect of the values on both mediators was also significant,  $\beta = -.06$ ,  $t(8625) = -11.482$ ,  $p < .001$  for the positive intrafamilial style and  $\beta = -.236$ ,  $t(8625) = -47.131$ ,  $p < .001$  for the negative intrafamilial style. Third, when the mediators and the values were entered as predictors, the effect of the mediators was significant,  $\beta = -.08$ ,  $t(8625) = -7.897$ ,  $p < .001$  for the positive intrafamilial style and  $\beta = .190$ ,  $t(8625) = 17.197$ ,  $p < .001$  for the negative intrafamilial style, but the effect of the values became non-significant,  $\beta = -.007$ ,  $t(8625) = -1.263$ ,  $p = .21$ . As illustrated in Figure 1, the indirect effects of both the positive intrafamilial style and the negative intrafamilial style were statistically significant,  $\beta = .005$ ,  $SE = .001$  [IC 95%: (.0034, .0073)] for the positive intrafamilial style and  $\beta = -.045$ ,  $SE = .004$  [IC 95%: (-.0518, -.0385)] for the negative intrafamilial style. Preacher and Hayes (2008) demonstrated that when zero falls outside the interval, mediation is present. Since zero fell outside both intervals, we can say that the direct effect of values on por-

| Table 3. Prediction of pornography consumption |                                   |
|--|-----------------------------------|
|  | Pornography consumption<br>B (SE) |
| <b>Block 1: Sociodemographic variables</b>     |                                   |
| Age  | .852*** (.08)                     |
| Ethnicity                                      | -.002 (.004)                      |
| Sex  | .383*** (.02)                     |
| R2 (%)   | .101***                           |
| <b>Block 2: Structural variables</b>           |                                   |
| Socioeconomic status                           | .004 (.01)                        |
| Family structure                               | -.017 (.01)                       |
| $\Delta R2$ (%)                                | .000                              |
| <b>Block 3: Individual variables</b>           |                                   |
| Values   | -.038*** (.01)                    |
| $\Delta R2$ (%)                                | .005***                           |
| <b>Block 4: Relational variables</b>           |                                   |
| Positive intrafamilial style                   | -.082*** (.01)                    |
| Negative intrafamilial style                   | .154*** (.01)                     |
| Positive mediation style                       | -.011 (.01)                       |
| Relational independence style                  | .241*** (.02)                     |
| Relational marginalization style               | -.009 (.01)                       |
| $\Delta R2$ (%)                                | .068***                           |
| <b>Total R2 (%)</b>                            | <b>.173***</b>                    |

N=6,559. Cell entries are non-standardized beta coefficients ( $\beta$ ) and SE. † $p < .1$ ; \* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$ .

nography consumption was mediated by both the positive and the negative intrafamilial styles.

#### 5. Discussion

The results of this research showed that relational lifestyles partially explain pornography consumption: positive intrafamilial styles are associated with a reduction in consumption while the opposite was found for negative intrafamilial styles (H1). On the other hand, it was found that the relationship between values and pornography consumption is mediated by both positive and negative intrafamilial relations (H2).

With regard to the sociodemographic variables, the results were convergent with those found in the previous literature concerning age and gender (Sabina & al., 2008; Ybarra & Mitchell, 2005). That is, male adolescents report consuming a greater quantity of pornography than female adolescents and that those in later adolescence report consuming pornography more frequently than those in early adolescence. The remaining sociodemographic or structural variables have insignificant effects on the consumption of pornography.

Regarding the lifestyle variables, the results support that the relationships that adolescents have with their parents configure their decision-making processes (Archer, 2012). A familial climate of dialogue, comprehension, and participation allows for an increase in the possibilities of a positive use of ICT. Conversely, negative intergenerational relations, which often lead to the search for role models outside of the family, including in untrustworthy contexts, are associated

with a greater negative consumption of new technologies. A familial climate that is violent, vengeful, and solitary and that considers the family to be a place of conflict can lead to greater consumption of pornography, increasing the related risks.

Regarding media consumption, the intensive use of the Internet to visit social networks, download music and movies, gamble online, and search for information on sexuality that the family does not provide (what has been called the «relational independence style») leads to a greater consumption of pornography, which in many cases can be accidental. Finally, using the group of friends and virtual relations to discuss issues that are not much talked about in the family, as in the case of sexuality, can induce young people's exploration of new experiences.

The results are relevant not only because they support the importance of relational lifestyles in decisions about risky consumption but also because they show how these same lifestyles are mediators of the effect of values on adolescent behavior. This finding supports the hypothesis of Brunsø and al. (2004) and the need to incorporate peer-to-peer strategies into media literacy programs, favoring the creation of positive friendship environments for cases in which violent family contexts prevail. Furthermore, the promotion of healthy lifestyles (and ICT usage) should include daily decision-making training, even in aspects that initially do not seem related to media consumption. Finally, the relevance of family role models is clear, given that they are the foundation for the construction of harmonious lifestyles (Corcuera & al., 2010; Osorio & al., 2009).

One of the limitations of the present study is that the sample included only adolescent students in schools located in cities of more than 75,000 inhabitants. Future studies on this topic could apply qualitative methodologies that would complement the interpretation of a phenomenon as complex as the consumption of pornography on the Internet, which would admit different conceptualizations depending on the users.

One of the strengths of this study is that it uses a sample representative of adolescents from 12 to 19 years of age in Colombia, which allows us to extract conclusions that can be extrapolated to adolescent students in the urban areas of this country. The correla-

tional nature of the design ensures this ability, although it reduces the possibility of confirming causal relationships between lifestyles and pornography consumption or establishing the direction of the data.

Finally, the present study can help in the design of intervention programs aimed at reducing pornography consumption and that are based on adolescent lifestyle-

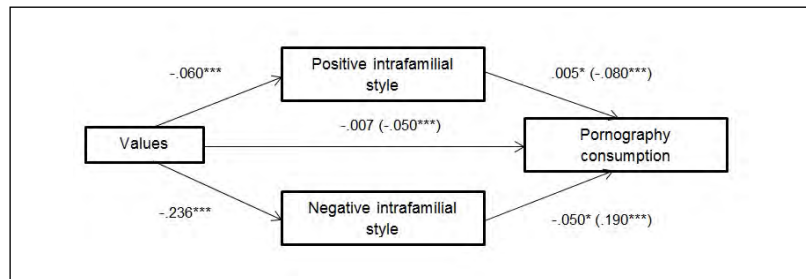


Figure 1. Mediation of lifestyles between values and pornography consumption  
\* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$ .

les to achieve this goal. For instance, an intervention designed to consider not only sociodemographic variables but also adolescents' lifestyles would allow a better matching or tailoring between the message of the intervention and its recipients, avoiding the appearance of a possible boomerang effect produced by the counter-attitudinal nature of the intervention for those who consume the most pornography (Brändle & al., 2011).

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