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Résumé

La violence dans les relations intimes (VRI) chez les jeunes constitue un problème de santé publique, en raison de sa prévalence élevée et des conséquences néfastes qui y sont associées, incluant le risque de revictimisation à l'âge adulte (Exner-Cortens et al., 2013; Gómez, 2011). Ainsi, il importe de s'attarder aux facteurs pouvant expliquer l'installation de la violence entre deux partenaires adolescents. Parmi ceux-ci, l'utilisation de pornographie a été identifiée comme étant un facteur de risque (Raiford et al., 2007) ou un facteur associé (Rostad et al., 2019; Rothman & Adhia, 2016) à la victimisation de VRI. Considérant que l'époque actuelle, marquée par la présence des technologies de l'information, favorise l'accessibilité au matériel pornographique dès un jeune âge (Smaniotto & Melchiorre, 2018), une attention doit être portée au visionnement de pornographie dans l'exploration des facteurs de risque du vécu de VRI, afin de mieux comprendre les associations entre ces variables. Ainsi, le présent essai doctoral explore les liens longitudinaux et bidirectionnels entre le visionnement de pornographie (c.-à-d., l'âge lors du premier visionnement de pornographie et la fréquence de visionnement dans les trois derniers mois) et la victimisation de VRI psychologique, physique et sexuelle. Ces analyses ont permis de tenir compte également des liens transversaux et des différences entre les genres, ainsi que de contrôler l'effet potentiel de la fréquence de masturbation et du moment de complétion du questionnaire (avant ou pendant la pandémie COVID-19). Pour l'étude présentée dans cet essai, les données des temps 1 et 2 (T1 et T2) de l'étude PRESAJ (Précurseurs des relations sexuelles et amoureuses des jeunes) ont été utilisées. Pour être inclus, les élèves devaient avoir rapporté une relation intime dans la

dernière année au T1 et/ou au T2. L'échantillon était composé de 1 556 adolescents au T1 (âge moyen = 14,55 ans) et de 900 adolescents (57,8% des participants du T1) au T2 (âge moyen = 15,46 ans). La cueillette de données a été effectuée à l'aide d'un questionnaire auto-rapporté administré une fois par année auprès de jeunes du secondaire dans 23 écoles de trois régions du Québec, de milieux socio-économiques variés. Les résultats mettent en lumière des associations transversales de faible magnitude, au T1, entre un âge plus jeune au premier visionnement de pornographie et la victimisation de VRI physique et psychologique, ainsi qu'entre une fréquence de visionnement de pornographie plus élevée et la victimisation de VRI physique. Toutefois, au niveau longitudinal, le modèle autorégressif croisé (*autoregressive cross-lagged*) n'a révélé aucune association significative entre le visionnement de pornographie et les trois formes de VRI étudiées (psychologique, physique et sexuelle), indépendamment du genre. Ainsi, le visionnement de pornographie ne semble pas représenter un facteur de risque significatif pour l'expérience de VRI chez les adolescents de notre échantillon. Ces résultats apportent une clarté supplémentaire à la littérature concernant ces associations et permettent de supposer que d'autres variables nécessitent possiblement une plus grande attention dans l'étude des facteurs de risque du vécu de VRI. Même s'il n'y a que des liens modestes entre les variables testées, des interventions visant à valoriser les relations intimes saines devraient être mises en place. Ces interventions pourraient également viser une sensibilisation quant au visionnement de pornographie.

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Liste des abréviations symboles ou sigles

- VRI..... Violence en relation intime
- DVV..... Dating violence victimization

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Introduction générale

L'adolescence est une période où plusieurs jeunes vivent leurs premières expériences amoureuses et sexuelles, les confrontant à de multiples défis relationnels (Hébert et al., 2018). Ces nouveautés peuvent être accompagnées d'un certain niveau de stress, en plus d'attentes irréalistes par rapport aux relations amoureuses (Harper & Welsh, 2007). Dans certains cas, cette combinaison peut inciter un jeune à vouloir préserver sa relation coûte que coûte (Harper & Welsh, 2007), notamment en utilisant des comportements violents (Hébert et al., 2018).

Violence en contexte de relation intime

C'est au début des années 1990 que la violence en contexte de relation intime (VRI) est devenue un sujet d'intérêt public au Québec (Hébert et al., 2018). Toutefois, elle constituerait, encore aujourd'hui, un champ de recherche important et novateur, d'après Glowacz et Courtain (2017). En effet, selon ces autrices, bien que les mouvements féministes des dernières décennies aient permis de sensibiliser la société et la communauté scientifique à la violence au sein de couples adultes, celle vécue par les adolescents et les jeunes adultes serait parfois banalisée, malgré le nombre grandissant d'études dévoilant son ampleur.

Définition

La VRI comprendrait toute forme de violence subie ou infligée par les jeunes de 10 à 24 ans (Vagi et al., 2013) dans le contexte d'une relation intime ou amoureuse, l'appellation « violence conjugale » étant réservée aux adultes (Hébert et al., 2018). L'Organisation mondiale de la Santé définit la VRI comme tout comportement causant un préjudice ou une souffrance psychologique, physique ou sexuelle chez une personne au sein d'une relation amoureuse (Heise & Garcia-Moreno, 2002). Dans le cadre du présent essai, l'expression « victimisation de VRI » fait référence au fait de subir de la VRI.

La majorité des équipes de recherche du domaine s'accordent pour diviser la VRI en trois principaux types de violence. La violence psychologique peut comprendre la critique répétitive, l'agression verbale envers un partenaire ou tout acte visant à l'isoler ou à le dominer (O'Leary, 1999). Celle-ci peut prendre la forme de menaces de violence physique ou de paroles visant à ridiculiser l'autre ou à le mettre en colère (Hébert et al., 2017). Il peut aussi être question de contrôle social ou économique, ou d'un contrôle de l'apparence de l'autre (Flores et al., 2005).

La violence physique implique une utilisation intentionnelle de la force physique (Breiding et al., 2015) et réfère, notamment, à des actions telles que donner un coup de poing ou de pied, une gifle, et au fait de pousser, de bousculer ou de secouer l'autre (Hébert et al., 2017).

La violence sexuelle représente une pression exercée envers un partenaire afin qu'il se soumette à des pratiques sexuelles non volontaires (Lavoie et al., 2009). Elle peut impliquer des gestes tels qu'embrasser, caresser, toucher ou tenter d'avoir une relation sexuelle avec une personne sans son consentement (Hébert et al., 2017).

Prévalence

De plus en plus d'études évaluent la prévalence de la VRI depuis quelques années (Glowacz & Courtain, 2017). À l'échelle internationale, une recension des écrits présente des études réalisées entre 2000 et 2011 portant sur la VRI menées en Europe et en Amérique du Nord, auprès de jeunes de 12 à 18 ans (Leen et al., 2013). La violence psychologique est identifiée comme étant la plus souvent rapportée (17-88 %), suivie de la violence physique (10-20 %) et de la violence sexuelle (1-76 %). Les écarts importants dans la prévalence sont liés aux différences méthodologiques des études, notamment en ce qui concerne les définitions des types de VRI, les instruments de mesure, la période de rapport de la violence vécue (p. ex., dans les 12 derniers mois ou au cours de la vie), ainsi que les populations étudiées (Leen et al., 2013). Par exemple, concernant la violence sexuelle, une étude réalisée aux Pays-Bas (de Bruijn et al., 2006) révèle un taux de prévalence de 1,6 % lorsqu'on s'intéresse à l'expérience d'une relation sexuelle forcée, alors que le taux de prévalence atteint 76 % lorsqu'on mesure spécifiquement les comportements sexuels non désirés de nature verbale.

Au Québec, selon *l'Enquête québécoise sur la santé des jeunes du secondaire 2016-2017*, réalisée auprès de plus de 62 000 élèves de la première à la cinquième secondaire, environ la moitié des jeunes (43 %) ont vécu une relation amoureuse dans la dernière année et, parmi ceux-ci, plus du tiers (36 %) rapportent avoir été victimes d'au moins une forme de violence dans ce contexte (Traoré et al., 2018). La violence subie aurait par ailleurs augmenté de six points de pourcentage depuis la version précédente de cette enquête, effectuée en 2010-2011 (Traoré et al., 2018). Une autre étude, menée auprès de 8 194 Québécois de 14 à 18 ans, indique que 62,7 % des filles et 49,5 % des garçons ayant vécu une relation amoureuse dans les 12 derniers mois auraient subi au moins une forme de VRI (Hébert et al., 2017). Le type de VRI le plus souvent rapporté dans cette étude est la violence psychologique, suivie de la violence physique, de la violence sexuelle et des comportements menaçants, rejoignant ainsi les résultats de Traoré et al. (2018) (violence psychologique : 28,5 % des élèves, violence physique : 13,5 % et violence sexuelle : 11,1 %).

La prévalence de la VRI varie toutefois selon le genre. En effet, les résultats de Traoré et al. (2018) indiquent que les filles subissent davantage de violence psychologique (33,7 % des filles et 23,4 % des garçons) et sexuelle (16,8 % des filles et 5,4 % des garçons) que leurs homologues masculins, bien qu'ils n'observent aucune différence significative en ce qui concerne la violence physique (13,7 % des filles et 13,4 % des garçons). Les résultats de Hébert et al. (2017) suggèrent, quant à eux, que les filles

subissent davantage de violence que les garçons, peu importe le type, la violence sexuelle comportant l'écart le plus grand (20,2 % des filles et 5,7 % des garçons).

Conséquences

Les conséquences de la VRI chez les adolescents sont nombreuses et peuvent affecter la santé mentale, physique et sexuelle des victimes (Flores et al., 2005), en plus d'augmenter le risque de revictimisation (Exner-Cortens et al., 2013; Gómez, 2011). Des études longitudinales ont permis de constater que des difficultés peuvent persister à long terme. Notamment, les jeunes ayant été victimes de VRI entre 12 et 18 ans auraient un plus grand risque de vivre certaines conséquences 5 ans plus tard (soit entre 18 et 25 ans) que les non-victimes (Exner-Cortens et al., 2013). Pour les filles, les conséquences comprendraient la consommation d'alcool et de cigarette ainsi que des symptômes dépressifs, alors que pour les garçons, les comportements antisociaux et la consommation de marijuana sont rapportés. Les comportements antisociaux et la consommation de substances illicites ont également été constatés à long terme chez les filles (Roberts et al., 2003) et des idées suicidaires ont été rapportées tant chez les filles que les garçons (Ackard et al., 2007; Exner-Cortens et al., 2013). L'importance des impacts potentiels de la VRI dans la vie des jeunes amène à se questionner sur les facteurs pouvant expliquer l'occurrence de ce phénomène.

Facteurs de risque

De nombreux facteurs augmentant la probabilité de victimisation de VRI ont été identifiés dans la littérature, dont certains sont liés aux habitudes de vie des jeunes. Les résultats de East et Hokoda (2015) indiquent que de consommer de la marijuana, de fréquenter des soirées où il y a présence d'alcool et d'activités sexuelles, ainsi que le fait d'être actif sexuellement, augmentent le risque d'être victime de VRI ultérieurement. De surcroît, la précocité des premières expériences sexuelles a été identifiée comme facteur de risque ou associé à la victimisation de VRI chez les garçons (O'Donnell et al., 2006) et les filles (Lavoie & Vézina, 2002). Également, chez les filles, les facteurs rapportés incluent le fait de vivre une relation amoureuse impliquant la relation sexuelle et d'avoir un plus grand nombre de partenaires sexuels (Cleveland et al., 2003; Kaestle & Halpern, 2005). Finalement, selon des études transversales (Rostad et al., 2019; Rothman & Adhia, 2016) et une étude longitudinale s'intéressant spécifiquement aux filles (Raiford et al., 2007), l'utilisation de pornographie est associée à une plus grande victimisation de VRI ou à la présence de celle-ci. Cette pratique étant de plus en plus commune chez les adolescents (Smaniotto & Melchiorre, 2018), il paraît essentiel de s'intéresser à ses impacts.

Consommation de pornographie chez les jeunes

L'époque actuelle, qui se caractérise par une accessibilité croissante aux technologies de l'information, serait propice à la consommation de pornographie chez les adolescents (Smaniotto & Melchiorre, 2018). Peter et Valkenburg (2016), dans leur

recension des écrits, indiquent que la quantité d'études sur le sujet a augmenté considérablement depuis 2005, notamment en raison des préoccupations liées à l'usage grandissant de la pornographie chez les jeunes.

Définition

La pornographie fait référence à un contenu sexuellement explicite destiné à créer une excitation sexuelle chez la personne qui le consomme (Hald et al., 2010). Ce terme inclut des représentations écrites, visuelles ou audiovisuelles de nudité ou de comportements à connotation sexuelle (Campbell & Kohut, 2017) pouvant être produites par des professionnels ou par des utilisateurs (Peter & Valkenburg, 2016). Il demeure important de noter que différents éléments complexifient la définition de ce concept. D'abord, il est parfois difficile de distinguer un contenu pornographique d'un contenu non-pornographique (Gagnon & Simon, 2005) et cela peut donc différer d'une étude à l'autre. Également, il existe plusieurs types de pornographie, par exemple, légale ou illégale, misogyne ou féministe, violente ou misant sur les scènes affectueuses et romantiques, etc.

Prévalence

À l'échelle internationale, deux recensions des écrits (Kohut et al., 2020; Peter & Valkenburg, 2016) ont révélé que les données de prévalence différaient grandement, notamment en raison de la diversité des méthodologies utilisées, du manque d'homogénéité dans l'opérationnalisation du terme, de l'explosion d'Internet dans les

dernières décennies et des différences culturelles. Également, la majorité des études mesurant la prévalence de la consommation de pornographie chez les jeunes utilisent un devis transversal, ce qui ne permet pas d'avoir un aperçu de l'évolution de cette consommation au cours de l'adolescence (Peter & Valkenburg, 2016). Malgré cela, Peter et Valkenburg (2016) affirment qu'une part considérable des jeunes consomment de la pornographie, avec entre 7 % et 59 % de ceux-ci le faisant intentionnellement. De façon plus spécifique, Hald et al. (2013) ont évalué la prévalence de la consommation de pornographie auprès de jeunes de 15 à 25 ans provenant des Pays-Bas : 44,8 % des filles et 88,2 % des garçons en avaient consommé dans la dernière année, principalement sur Internet. Selon une étude incluant 10 930 adolescents de 14 à 17 ans de six pays d'Europe, 76,8% des garçons avaient visionné de la pornographie dans la dernière année (40% au moins une fois/semaine), comparativement à 42,9% des filles (8,9% au moins une fois/semaine) (Andrie et al., 2021). Ainsi, bien que les jeunes, tous genres confondus, regardent de plus en plus de pornographie, la proportion d'adolescentes qui en consomment demeure moindre que celle des adolescents. De plus, les garçons auraient tendance à visionner pour la première fois du matériel pornographique à un âge plus précoce que les filles (Bóthe et al., 2020; Sinković et al., 2013). Les garçons consommeraient également de la pornographie plus fréquemment que les filles (Hald et al., 2013; Štulhofer et al., 2019).

Conséquences

Les recherches sur la consommation de pornographie conduites au cours des dernières années font ressortir des impacts positifs et négatifs chez les jeunes. Notamment, son utilisation pourrait constituer une source d'information à propos de la sexualité et un moyen de provoquer l'excitation sexuelle, selon ce qu'ont rapporté des jeunes de 14 à 20 ans, dans le cadre d'entrevues individuelles et de groupes focalisés (Löfgren-Mårtenson & Månsson, 2010). La pornographie a d'ailleurs été identifiée comme étant la source d'information la plus utile concernant les relations sexuelles chez de jeunes adultes (18 à 24 ans) (Rothman et al., 2021). En contrepartie, cette pratique peut s'avérer plutôt néfaste, particulièrement chez les jeunes. Le visionnement de pornographie à l'adolescence (Farré et al., 2020) ou un âge plus jeune lors de la première exposition à la pornographie (Sinković et al., 2013) sont associés à une tendance plus importante à s'engager dans des conduites sexuelle risquées. En effet, bien que plusieurs jeunes soient conscients des différences entre ce type de matériel et la réalité (Puglia & Glowacz, 2015), il est possible de supposer que certains se montrent plus tolérants dans leurs relations intimes vis-à-vis des comportements observés dans la pornographie.

D'ailleurs, Harsey et al. (2021) se basent notamment sur la théorie de scripts sexuels et celle de l'auto-objectification pour établir des hypothèses explicatives des liens entre l'utilisation de pornographie et la victimisation de violence (Fredrickson et al., 1998; Simon & Gagnon, 1986). D'abord, une plus grande utilisation de pornographie a été associée à un plus grand risque d'engagement dans des comportements sexuels qui

concordent avec les scripts sexuels présentés dans la pornographie, ou à un plus grand intérêt à les expérimenter (Bridges et al., 2016). Ainsi, nous pouvons supposer que la pornographie, qui présente fréquemment des stéréotypes sexuels empreints de violence (Bridges et al., 2010; Vera-Gray et al., 2021), contribue à une plus grande acceptation et à une normalisation de la violence entre partenaires intimes. Il paraît toutefois essentiel de conserver un regard critique à l'égard de cette dernière hypothèse, puisque d'après Gagnon & Simon (2005), l'influence des scripts sexuels et sociaux chez les consommateurs de pornographie comporte des limites (p. ex., lorsque les représentations présentées ne sont pas plausibles). D'autre part, la théorie de l'objectification reflète la tendance des gens à mesurer leur valeur en fonction de leur apparence physique, souvent comparée à des standards de beauté irréalistes (Fredrickson et al., 2011; Fredrickson et al., 1998). L'auto-objectification serait associée à l'utilisation de médias sexuellement explicites (Karsay et al., 2018) et à une plus grande victimisation sexuelle (Franz et al., 2016).

Consommation de pornographie et violence dans les relations intimes

Bien que Herbitter et al. (2022) n'aient trouvé aucune association significative entre l'exposition à la pornographie violente et l'expérience de VRI, au sein d'un petit échantillon de filles s'identifiant en tant que minorité sexuelle, des études transversales (Rostad et al., 2019; Rothman & Adhia, 2016) et une étude longitudinale (Raiford et al., 2007) ont révélé des associations entre le visionnement de pornographie et la victimisation de VRI. D'autres études transversales se sont intéressées spécifiquement à la victimisation

de violence sexuelle, dans divers contextes, et ont révélé des associations avec l'utilisation de pornographie (Bekele et al., 2011; Bonino et al., 2006; Harsey et al., 2021).

Somme toute, ces études ont observé une association positive entre la consommation de pornographie et l'expérience de différentes formes de violence, dont la VRI, chez des adolescents provenant de plusieurs pays et milieux économiques. Parmi celles-ci, la plupart ont utilisé un devis transversal, ne permettant pas de vérifier si les liens perdurent à travers le temps, ou de déterminer si une variable précède l'autre. De plus, la seule étude longitudinale répertoriée (Raiford et al., 2007) a examiné le visionnement de pornographie uniquement en tant que facteur de risque de la victimisation de VRI, ne permettant pas d'éliminer la possibilité de la relation inverse. Ces études ont également été menées à l'extérieur du Québec, avec des échantillons relativement petits, et certaines d'entre elles se sont intéressées spécifiquement à une population féminine, limitant ainsi la possibilité de généraliser les résultats à une population adolescente québécoise, tous genres confondus. Or, le présent essai doctoral vise à étudier les associations entre le visionnement de pornographie et la victimisation de VRI au niveau longitudinal et bidirectionnel, auprès d'adolescentes et adolescents québécois, en tenant compte également des liens transversaux, du genre et de la masturbation. Finalement, une autre variable utilisée a permis de contrôler les effets potentiels de la pandémie COVID-19 puisque les participants ayant répondu au questionnaire pendant la pandémie ont pu être identifiés (Böthe et al., 2022).

Afin que certains comportements des jeunes, comme le visionnement de pornographie, puissent être étudiés, il est essentiel de retenir que l'étude des facteurs de risque de la victimisation ne devrait jamais résulter en un sentiment de responsabilisation chez les victimes, mais plutôt en une meilleure compréhension de ce phénomène, afin de favoriser des interventions pour diminuer son occurrence.

Le présent essai a été rédigé sous la forme d'un article scientifique, présenté dans le chapitre premier. Cet article, intitulé *Cross-sectional and longitudinal associations between pornography use and dating violence victimization: Are there risks for teenagers?*, a été rédigé en anglais et soumis pour publication en août 2023 à la revue *Journal of Interpersonal Violence*. Les sections de l'article comprennent le contexte théorique, la description de la méthodologie utilisée, la présentation des résultats et une discussion à leur sujet, les forces et les limites de l'étude, ainsi que des pistes suggérées pour des études futures.

Chapitre premier

**Cross-sectional and Longitudinal Associations Between Pornography Use and
Dating Violence Victimization: Are There Risks for Teenagers?**

Sara Martel, Sophie Bergeron, Beáta Bóthe, Marie-Pier Vaillancourt-Morel, Martine
Hébert, & Jacinthe Dion

Abstract

Dating violence victimization (DVV) is a prevalent public health problem with harmful consequences among adolescents. Pornography use has been identified among the factors associated with DVV. However, most studies have relied on cross-sectional designs, limiting the ability to determine temporal relationships between these variables. The present study assessed bidirectional longitudinal associations between pornography use and DVV (psychological, physical, and sexual), also examining cross-sectional associations and gender differences. Participants' self-report data from two assessments of a longitudinal study were used. The sample consisted of 1,556 teenagers ($M_{age} = 14.55$ years, $SD_{age} = .630$; 51.5% were girls) having reported an intimate relationship in the past year at the first and/or second time point (T1/T2). Whereas some cross-sectional associations between pornography use and DVV were observed at T1, results from the autoregressive cross-lagged model revealed no significant longitudinal association between pornography use and the three forms of DVV, regardless of gender. Thus, pornography use may not represent a significant risk factor over time for DVV in adolescents. These findings provide additional insights concerning the associations between pornography use and DVV and suggest that emphasis should perhaps be placed on other variables in the study of risk factors for DVV. Still, although modest, transversal

links support the importance of interventions that promote healthy intimate relationships in adolescence and education about pornography use.

Keywords: intimate violence; pornography; sexually explicit material; adolescent health.

Introduction

According to the results of a large survey among 8,194 Canadian teenagers, nearly two out of three girls (62.7%) and one out of two boys (49.5%) reported at least one experience of dating violence victimization (DVV) in the past 12 months (Hébert et al., 2017). Given its numerous negative outcomes (Banyard & Cross, 2008; Hébert et al., 2019), as well as data indicating that a DVV experience increases the risk of re-victimization in adulthood (Exner-Cortens et al., 2013; Gómez, 2011), it is important to understand the factors that can explain the onset of violence victimization in adolescents' romantic relationships. Among the factors to consider, pornography use has been identified as a significant correlate of DVV (Raiford et al., 2007; Rostad et al., 2019; Rothman & Adhia, 2016). Explanatory hypotheses related to sexual scripts and self-objectification theories suggest that pornography use may have an impact on the occurrence of DVV. Since most studies to date were cross-sectional (Rostad et al., 2019; Rothman & Adhia, 2016), it is not possible to know whether links are bidirectional, especially since the only longitudinal study examined pornography use as a predictor of DVV, not the reverse (Raiford et al., 2007). Moreover, the associations between pornography use and the different forms of DVV (psychological, physical, and sexual) remains unknown. In the current era that is marked by the presence of digital technologies and the accessibility of pornographic material for youth (Smaniotto & Melchiorre, 2018), it is important to continue exploring the possible impacts pornography use may have on DVV over time. Thus, this study aimed to examine the longitudinal and bidirectional associations between pornography use and greater DVV (psychological, physical, and

sexual), also examining cross-sectional associations and testing for gender differences, among a large sample of adolescents from diverse socio-economic backgrounds.

Dating Violence

According to the World Health Organization, intimate partner violence is defined as any behavior that causes psychological, physical, or sexual harm or suffering to someone in an intimate relationship (Heise & Garcia-Moreno, 2002). Dating violence (DV) refers to a form of intimate partner violence between dating partners who are 10-24 years of age (Vagi et al., 2013) and includes physical, psychological, and sexual violence. A review of studies on DV conducted in Europe and North America between 2000 and 2011 among adolescents aged 12 to 18 years identified psychological violence as the most commonly reported DVV (17-88%), followed by physical violence (2-59%) and sexual violence (1-76%) (Leen et al., 2013). Large differences in the prevalence rates observed were related to methodological differences across studies, including definitions of forms of DV, measurement instruments, reporting period of violence experienced (e.g., in the past 12 months or throughout life), in addition to the populations studied (Leen et al., 2013). Prevalence rates appear to be similar across genders, except for sexual violence victimization, which is more prevalent among girls (Leen et al., 2013). However, results from a large Canadian population-based study suggest that girls experienced more violence than boys in the last 12 months, regardless of form, with sexual violence showing the largest gender differences (20.2% of girls and 5.7% of boys experienced it) (Hébert et al., 2017).

Pornography Use

Many factors associated with an increased likelihood of DVV have been identified in the literature, some of which are related to youth life habits. For example, a study indicated that marijuana use, going to parties where there is alcohol and sexual activity, in addition to being sexually active in adolescence, increased the risk of DVV in the future (East & Hokoda, 2015). Other studies have also shown that pornography use is associated with DVV (Raiford et al., 2007; Rostad et al., 2019; Rothman & Adhia, 2016). Smaniotto and Melchiorre (2018) argue that the Internet now allows teenagers to easily access pornographic material and mitigates the transgressive aspect of it, which underlines the importance of focusing more on this phenomenon.

As suggested by Harsey et al. (2021), sexual scripts and self-objectification theories could explain associations between pornography use and violence victimization (Fredrickson et al., 1998; Simon & Gagnon, 1986). According to Frith and Kitzinger (2001), the central notion of the sexual scripts framework (Simon & Gagnon, 1986) is "the idea that sexuality is *learned* from culturally available messages that define what 'counts' as sex, how to recognize sexual situations, and what to do in sexual encounters" (p. 210). Greater pornography use was associated with greater commitment to sexual behaviors consistent with the sexual scripts presented in pornography, or having an interest in trying them (Bridges et al., 2016). Therefore, it is possible that due to its influence on sexual scripts, pornography – which often exposes violent sexual stereotypes (Bridges et al.,

2010; Vera-Gray et al., 2021) – leads adolescents to accept and normalize the occurrence of intimate partner violence.

Objectification theory states that people tend to measure their worth by their physical appearance, which is compared to sexually objectifying and unrealistic standards of beauty of our culture (Fredrickson et al., 2011; Fredrickson et al., 1998). Moreover, higher self-objectification has been shown to be associated with sexualizing media use (Karsay et al., 2018) and greater sexual victimization (Franz et al., 2016). Therefore, pornography use could be associated with higher self-objectification, which in turn would be associated with sexual victimization, and possibly DVV.

Pornography use refers to intentionally looking at or listening to pictures or videos of nude individuals, or picture or videos in which people are having sexual activities (Kohut et al., 2018; Kohut et al., 2020). Although prevalence rates differ greatly, specifically due to the diversity of methodologies used and the explosion of the Internet in recent decades (Peter & Valkenburg, 2016), a study conducted in six European countries among 10,930 adolescents aged 14 to 17 years reported that 76.8% of boys watched pornography in the past 12 months (40% at least once a week), compared to 42.9% of girls (8.9% at least once a week) (Andrie et al., 2021). Also, boys tend to use pornography for the first time at an earlier age (Böthe et al., 2020; Sinković et al., 2013).

Research on pornography use points to both positive and negative outcomes for youth. In particular, pornography use could represent a source of information about sexuality and a means of stimulating sexual arousal (Böthe et al., 2019; Löfgren-Mårtenson & Månsson, 2010). Pornography has also been identified as the most helpful source of information about how to have sex for young adults (18-24 years) (Rothman et al., 2021). On the other hand, pornography use in adolescence (Farré et al., 2020) or early exposure (Sinković et al., 2013) are associated with a greater tendency to engage in high-risk sexual behaviors, and might also be associated with more DVV. We can hypothesize that youths may associate this content with being representative of reality and reproduce or accept these behaviors with their romantic partner, although many are aware of the differences between pornographic content and reality (Puglia & Glowacz, 2015).

Pornography Use and Dating Violence

Associations between pornography use and DVV have mostly been studied using cross-sectional designs, limiting our knowledge concerning the potential long-term outcomes of porn use. Still, although the results of Herbitter et al. (2022) did not find a significant association between exposure to violent pornography and DVV among a small sample of girls identifying as a sexual minority, most of the limited studies on this topic suggest that pornography is associated with DVV. In a sample of 1,694 American adolescents, violent pornography use was associated with reporting physical and sexual DVV (but not with threatening DVV) among boys; it was not significant among girls (Rostad et al., 2019). In a sample of 72 American teens aged 16-17, mainly African

American or Hispanic individuals from disadvantaged economic backgrounds, DV victims watched pornography more frequently than non-victims (Rothman & Adhia, 2016). Finally, the results of a longitudinal study conducted among 522 African-American girls aged 14 to 18 indicated that adolescents who reported watching X-rated movies in the past three months were twice as likely to report DVV (verbal or physical; both forms were pooled together and sexual DVV was not examined) in the following year, compared to those who had not watched X-rated movies (Raiford et al., 2007). However, although this latter study was longitudinal, it did not assess bidirectional links and the authors point out that the results may be applicable only to African-American adolescent girls who live in a high-risk social environment. Also, most of the above studies did not examine the different forms of DVV separately in relation to pornography use (i.e., they compared DV victims and DV non-victims, regardless of the form), which limits our understanding of the associations between pornography use and each form of DVV over time.

Other cross-sectional studies have found associations between pornography use and sexual victimization (e.g., harassment, sexual coercion, sexual assault), in particular among adolescent girls (Bekele et al., 2011; Bonino et al., 2006). Another study also found that women who were unintentionally exposed to Internet pornography before the age of 14 reported more childhood sexual abuse, sexual abuse in adulthood, and other forms of sexual victimization than those who were exposed at age 14 and older (Harsey et al., 2021). This last study also showed that women who had never viewed Internet pornography reported less interpersonal sexual objectification than women who had ever

watched it intentionally at a younger age. However, these studies focused on sexual victimization exclusively, which limits the application of their findings to other forms of violence or to DVV specifically.

The Present Study

Although the aforementioned studies showed associations between pornography use and the experience of different forms of violence victimization, including DVV, among adolescents from different countries and economic backgrounds, almost all relied on a cross-sectional design, focused specifically on women, used relatively small samples and/or studied samples of youth from high risk geographical locations or disadvantaged economic backgrounds. Therefore, the present study aimed to address these gaps by examining longitudinal and bidirectional associations between pornography use and the experience of psychological, physical, and sexual DVV among adolescents, taking into account cross-sectional associations. Moreover, we assessed two modalities of pornography use (i.e., frequency of viewing in the past three months, in addition to the age of first pornography use), improving upon what has been measured in previous studies. Our overarching hypothesis was that a younger first viewing age and a higher frequency of viewing during the past three months in the first data collection wave (T1) would be associated with each form of DVV at the first and second data collection waves (T2). Considering gender differences in pornography use (Andrie et al., 2021; Bóthe et al., 2020; Peter & Valkenburg, 2016) and DV experience (Hébert et al., 2017), we examined whether the associations differed according to gender. Moreover, since

pornography use is often accompanied by masturbation and the importance of excluding the potential role of this variable when studying pornography use has recently been highlighted (Perry, 2020; Prause, 2019), we also controlled for frequency of masturbation. Finally, we controlled for COVID-19 status (i.e., participants who answered the questionnaire during the pandemic were identified to rule out the potential effects of the pandemic on our results) (Böthe et al., 2022).

Method

Participants

After excluding participants who did not complete the DVV scale at T1 and/or T2, and failure to pair protocols between T1 and T2, the sample for the present study included 1,556 students at T1 ($M_{age} = 14.55$ years, $SD = 0.63$, ranging from 14 to 17 years) and 900 students (57.8% of T1) at T2 ($M_{age} = 15.46$ years, $SD = 0.58$, ranging from 14 to 18 years).

At T1, 51.5% of participants reported being a girl ($n = 802$), 48.0% a boy ($n = 747$) and 0.5% ($n = 7$) reported being non-binary, gender fluid or “other”. The majority identified with the culture [masked for review]. Most adolescents reported living with both parents (65.9 %; $n = 1026$) and that their mothers or parent 1 (44.0 %; $n = 683$), and their fathers or parent 2 (32.3 %; $n = 501$) had completed university.

Procedure

For this study, we leveraged data from the first two time points of a larger longitudinal study examining adolescents' sexuality, which began in 2018-2019. Data collection was carried out in classes during school hours. Electronic tablets were distributed to students so that they could answer the questionnaires, under the supervision of research assistants. A \$10 gift card was offered to all participating students as compensation. The questionnaires were completed anonymously using the *Qualtrics Research Suite*. For T2, due to the school closures related to the COVID-19 pandemic, schools that had not yet been visited during school hours when the pandemic broke out received the survey by email. To match questionnaires between T1 and T2, an identification code was used as an anonymous identifier (Ripper et al., 2017; Yurek et al., 2008). This study was approved by two Research Ethics Boards [masked for review].

The adolescents surveyed were from public and private high schools, French and English, located in [masked for review]. Among the 50 schools from diverse socio-economic backgrounds that were contacted, 23 agreed to participate, 16 did not respond to emails or calls and 11 refused to participate. Fourteen of the participating schools were located in remote areas and nine in urban areas.

To be included in the study, adolescents had to be in ninth grade and at least 14 years of age at T1. At T1, among the 3,055 potential participants, four were excluded since they were 13 years old, four because they had inconsistent answers, and 143 because they

failed at least two of the three attention questions. Questionnaires from 2,904 teenagers were retained for T1. At T2, the students who were then in grade 10 answered the questionnaires. Among the 2,001 participants who completed the questionnaires, 27 were excluded because they failed at least two of the three attention questions and two had inconsistent answers. Thus, 1,972 participants completed T2, for a retention rate of 67.9%. Among those participants, only those who had been in a romantic relationship in the past 12 months answered the DVV questionnaire at T1 (45.9% of the sample) and/or T2 (48.8% of the sample) and were included in the analyses, as participants who completed that scale are the ones who were in a romantic relationship at the time of the data collection or had been in the last 12 months.

Measures

Socio-demographic characteristics. Socio-demographic information (age, gender, family situation, culture, etc.) were collected using a questionnaire created by the research team.

Romantic relationships. Items from one of our prior studies with adolescents [masked for review], as well as other investigator-derived questions collected information about the students' romantic relationships. A definition for "going out with someone" or dating was provided: "Going out with someone means you are dating the person. This relationship may have lasted only a few days or many weeks, months or years."

Adolescents who had been in a romantic relationship in the past 12 months were then asked to answer questions about DVV.

Dating violence victimization. To measure the experience of three forms of DVV (psychological, physical, and sexual) in the last 12 months, 10 items regarding victimization from the *Conflict in Adolescent Dating Relationships Inventory short form (CADRI-S)* (Fernandez-Gonzalez et al., 2012) were used, which is a short version of the *Conflict in Adolescent Dating Relationships Inventory (CADRI)* (Wolfe et al., 2001). Using a four-point Likert scale (*Never, Seldom: 1-2 times, Sometimes: 3-5 times, and Often: 6 times or more*), teenagers indicated the number of times they had experienced the situations listed, during a conflict or argument with a dating partner (present or past) in the last 12 months (e.g., physical DVV (2 items) "my partner slapped or pulled my hair"; psychological DVV (6 items) "My partner insulted me with put-downs"; sexual DVV (2 items) "My partner touched me sexually when I didn't want them to"). For each type of DVV, a higher score indicates a higher level of DVV experienced. Cronbach's alphas ranged from .64 to .77 for the two data collection waves for the three forms of DVV.

Pornography use. Adolescents were instructed to read a definition (Kohut et al., 2018; Kohut et al., 2020) before answering the questions regarding pornography: "For the following questions, the term 'pornography' is used to refer to: intentionally looking at or listening to: (1) pictures or videos of nude individuals, (2) picture or videos in which people are having sexual activities." They were then asked to answer an item about

lifetime pornography use: "Have you ever watched pornography in your life?" (0 = *No*; 1 = *Yes*). If the participant answered "Yes", they were asked to report their age when they first used pornography ("How old were you the first time you watched pornography?"). Moreover, based on previous studies (Carroll et al., 2017; Kohut et al., 2018; Maas et al., 2018), the following question was asked to evaluate the frequency of pornography use: "On average in the last THREE months, how many times did you watch pornography?" Youth were asked to respond using an eight-point Likert-type scale ranging from 0 = *Never* to 7 = *Many times per day*. A new pornography use frequency variable was computed for T1 and for T2, based on the answers to the lifetime pornography use and frequency of pornography use variables (Bóthe et al., 2022; Bóthe, Vaillancourt-Morel, et al., 2021). The answers of those adolescents who indicated that they had not previously used pornography (i.e., answering "No" to the lifetime pornography use question; T1: $n = 421$, 27.1%; T2: $n = 179$, 20.0%) were recoded to represent "Never" in the pornography use frequency question.

Masturbation frequency. Participants read a definition before answering questions about masturbation: "For the following questions, 'masturbation' refers to seeking sexual pleasure by self-stimulation of the genitals (i.e., by oneself), either by manual caresses, sex toys, rubbing, pressure or any other technique. Masturbation may or may not lead to an orgasm." Then, students were asked about lifetime masturbation: "Do you masturbate?" (0 = *No*; 1 = *Yes*). For those who answered "Yes", the following question was asked to assess frequency of masturbation in the past three months: "On

average, over the past three months, how often did you masturbate?" An eight-point scale was used to answer the question (1 = *Not once in the past three months*; 8 = *More than once a day*). A new masturbation frequency score was computed, based on the lifetime masturbation and frequency of masturbation variables (Bóthe et al., 2022; Bóthe, Vaillancourt-Morel, et al., 2021). The answers of those adolescents who indicated that they had not masturbated before (i.e., answering "No" to the lifetime masturbation question T2: $n = 164$, 18.3%) were recoded to represent "Never" in the masturbation frequency question. Only masturbation frequency at T2 was used as a control variable as this question was only asked in T2.

COVID-19 status. To control for the COVID-19 status in the analysis, participants who answered the questionnaire during the pandemic were coded as 1, and those who completed it before (March, 2020) were coded as 0 (i.e., 40.8% at T2).

Statistical Analysis

Descriptive statistics were computed using SPSS 27. An autoregressive cross-lagged model was performed in *Mplus* 8.6 to test the hypothesized associations between pornography use (i.e., age at first pornography use, and pornography use frequency) and dating violence (i.e., psychological, physical, and sexual violence), considering potential gender differences. Masturbation frequency and COVID-19 status (if data was collected before or during the pandemic) were controlled in the analysis.

A sequential procedure was used to test different variations of the same model that examined the hypothesized associations. We started with a model (Model 1) examining the associations between the T1 and T2 age at first pornography use, pornography use frequency and dating violence without control variables in the total sample (Girouard et al., 2021; Paquette et al., 2022). Next, we tested the same model with the control variables (Model 2). Then, we examined whether this model varied based on gender (i.e., boys vs. girls¹) using multi-group analysis (Model 3). Lastly, we put forth this difference test and the associations between T1 and T2 age at first pornography use, pornography use frequency and the dating violence factors were constrained to be equal across the groups (Model 4). When comparing Model 3 and Model 4 (i.e., unconstrained and constrained models), changes in the chi-square, CFI, TLI, and RMSEA values were examined. A significant corrected chi-square difference test, significant decreases in CFI and TLI ($\Delta\text{CFI} \leq .010$; $\Delta\text{TLI} \leq .010$) and significant increases in RMSEA ($\Delta\text{RMSEA} \leq .015$) (Bóthe, Tóth-Király, et al., 2021; Chen, 2007; Cheung & Rensvold, 2002; Girouard et al., 2021) indicated whether the constrained and unconstrained models differed significantly (i.e., whether the associations differed significantly between boys and girls).

All models were estimated using robust-maximum-likelihood (MLR), due to the non-normality of the data. As the tested models were fully saturated, the commonly used goodness-of-fit indices were: Tucker–Lewis index (TLI) = 1.00, Comparative Fit Index

¹ Given the small sample size in the non-binary group ($n = 7$ at T1), we could not statistically compare their group to the boys' and girls' groups.

(CFI) = 1, and Root-Mean-Square Error of Approximation (RMSEA) = 0 (Browne & Cudeck, 1993; Marsh et al., 2005; Schermelleh-Engel et al., 2003). Following prior guidelines (Newman, 2014), the full information maximum likelihood (FIML) method was used to handle missing data (ranging between 0% to 14.3 at Time 1 (and 29.0% for age at first pornography use), and between 43.1% to 55.7% at Time 2 - these higher percentages are mainly due to the school closures during the COVID-19 pandemic).

Results

Descriptive and Correlational Results

Overall, 64.6% of adolescents at T1, and 71.9% at T2 reported pornography use. In addition, more than 40% of participants who reported dating in the past 12 months experienced at least one form of DV (psychological, sexual or physical violence) at T1 and T2 (see Table 1 for descriptive statistics by gender identity). Descriptive statistics and Pearson correlations between pornography use frequency, age at first pornography use, DVV and control variables are reported in Table 2 for the total sample. The majority of the associations between age at first pornography use, pornography use frequency, and DVV were significant, though the magnitudes of the associations were small (r ranging from .10 to .19, $ps < .05$).

Longitudinal and Cross-sectional Associations between Age at First pornography Use, Pornography Use Frequency, and Dating Violence Victimization

We examined the associations between pornography use frequency, age at first use, and DVV (Model 1). Then, we added the control variables (Model 2). Next, we examined the hypothesized associations between the age at first pornography use, pornography use frequency and DVV factors (i.e., psychological, physical, and sexual violence) in groups of boys and girls. We compared the constrained model (Model 4) to the unconstrained model (Model 3). When comparing Models 3 and 4, the corrected chi-square difference test was not significant ($\Delta\chi^2 = 11.15, p = .516$). These results suggest that associations between DVV factors, age at first pornography use and pornography use frequency did not differ significantly across boys and girls. Therefore, following the principle of parsimony, results of Model 2 (i.e., total sample with control variable) should be interpreted (see Figure 1; see Table S1 in the online supplementary materials presenting all the effects). This model included all adolescents, including non-binary participants.

In this final model, age at first pornography use at T1 was negatively associated with psychological and physical DVV at T1. Also, pornography use frequency at T1 was positively associated with physical DVV at T1. No other cross-sectional associations between pornography and DVV were found. The age at first pornography use at T1 and pornography use frequency at T1 were not significantly associated with DVV at T2 (all $ps > .185$). Moreover, prior higher levels of DVV at T1 were not significantly related to the age at first pornography at T2 and pornography use frequency at T2 (all $ps > .195$). In

summary, no significant longitudinal associations were observed between DVV, age at first pornography use, and pornography use frequency over one year (T1-T2).

Discussion

Pornography use has been identified as being associated with a greater risk of DVV, mostly in cross-sectional studies (Rostad et al., 2019; Rothman & Adhia, 2016). The present study aimed to expand this knowledge by examining longitudinal and bidirectional associations between pornography use characteristics (i.e., age at first use and frequency of use) and experiencing DVV in a large sample of adolescents, also considering cross-sectional associations, potential gender differences, in addition to controlling for masturbation frequency and COVID-19 status. Overall, although some cross-sectional associations (of low magnitude) were found, no significant longitudinal associations or gender differences were observed between adolescents' pornography use and DVV.

The hypotheses that pornography use frequency and younger age at first use would be associated positively with DVV a year later were not supported. These results are in contrast with those of Raiford et al. (2007), who used a longitudinal design with a one-year follow-up and identified viewing X-rated movies as a predictor of DVV among 522 African-American girls aged 14 to 18. The reverse associations were also not significant (DVV forms at T1 were not associated with pornography use at T2). Therefore, we only found some cross-sectional associations at T1 between younger age at first use of

pornography and physical and psychological DVV, and between pornography use frequency and physical DVV. The latter finding is consistent with previous studies (Rostad et al., 2019; Rothman & Adhia, 2016), although Rostad et al. (2019) focused on having watched violent pornography, not the frequency of pornography use in general. Among the few studies on this topic, only one did not find significant cross-sectional associations between exposure to violent pornography and DVV among a small sample of adolescent girls from sexual minorities (Herbitter et al., 2022). Moreover, in Harsey et al. (2021), the age at first intentional pornography use was not generally associated with sexual victimization, but the age at first unintentional viewing was. Even if we did not measure the intentional versus unintentional aspect of pornography use, our results regarding the associations between younger age at first use of pornography and DVV may suggest that young adolescents do not watch pornography intentionally.

Although our design precludes causality inferences, it is possible that the associations between frequency of pornography viewing, its use at a younger age and DVV are short-term rather than long-term, which would explain why other cross-sectional studies have found links (Rostad et al., 2019; Rothman & Adhia, 2016). It may also be that the associations between pornography and DVV occur in younger adolescents (compared to older one). In light of the theories about the links between pornography use and DVV, pornography use could be related to sexual scripts in the short-term (Bridges et al., 2016) and might increase self-objectification (Karsay et al., 2018), which in turn would be associated with DVV. As adolescents grow up, their critical thinking in terms of

pornography may be sufficiently developed to enable them to find healthier and more realistic representations of themselves and their sexuality. For example, results from Puglia and Glowacz (2015) indicate that users and non-users of pornography identically reported the negative aspects associated with pornography viewing. According to the authors, this anticipation of negative effects could reflect a critical attitude towards this medium and thus reduce its impact on youths' sexuality. They suggest that we should not perceive the use of pornography solely in terms of risk for the psychosexual development of teenagers, but rather focus our efforts on providing information in a way that fosters their critical thinking. Moreover, a longitudinal study among Croatian teenagers showed both a significant increase in the use of sexually explicit materials and a significant decrease in perceived realism of these contents, but no statistically significant association between these variables (Wright & Štulhofer, 2019).

Overall, since our only association are cross-sectional and of low magnitude, our results may reflect that pornography use is not a significant risk factor for DVV. Other online behaviors may promote DVV, including communication technologies (Baker & Carreño, 2016) and sexting (Van Ouytsel et al., 2021), which should be further studied. Besides, as found in another study, pornography use may rather be a risk factor for DV perpetration (Rostad et al., 2019) or for violence victimization experienced in other contexts than dating relationships, such as sexual victimization (Bekele et al., 2011; Bonino et al., 2006; Harsey et al., 2021).

Strengths, Limitations, and Future Studies

Using a large sample of adolescents from various socio-economic backgrounds, this study adds to the body of literature on DVV by examining the directionality of associations between pornography use (frequency and first age of use) – a potential risk factor for DVV – and three forms of DVV (psychological, physical and sexual) over time. The longitudinal and bidirectional design made it possible to examine whether the cross-sectional associations differed after one year and whether pornography use preceded DVV and vice versa. The use of questionnaires requiring participants to reflect on DVV in the past year and pornography use frequency in the past three months may have minimized recall bias. Also, controlling for masturbation frequency and COVID-19 status allowed us to isolate the contribution of our variables of interest.

However, these results must be interpreted considering certain limitations. First, self-report questionnaires were used to measure all variables. The answers from participants can therefore be prone to biases, leading to either over-reported or under-reported behaviors. Also, the characteristics of our sample may limit the possibility of generalizing our results. Notably, given the small sample size of non-binary participants, we could not statistically compare their group to the boys' and girls' groups. Future studies could aim for a more diverse sample, especially with regard to gender identity. Although we evaluated both pornography use frequency and the age at first viewing, some studies suggest that additional variables could have provided a more complete portrait of participants' pornography use and influenced the associations between our variables. For

example, the results from Rostad et al. (2019) have shown that violent pornography exposure was associated with sexual and physical DVV. Moreover, our research design does not inform us of the potential effects in the longer term, in sexuality in adulthood with a stable partner. Therefore, future studies could examine the short- and long-term impacts of pornography on their perception of what is (or not) acceptable in a romantic relationship. These studies could assess not only the viewing or not, but importantly, the content of what is watched. In any case, the study of risk factors of victimization should not be conducted to increase victims' responsibility, but rather to promote better awareness of safe relationships.

Conclusion

Considering that DVV may increase the risk of re-victimization in adulthood (Exner-Cortens et al., 2013; Gómez, 2011), it seems paramount to take an interest in the factors that could be associated with its occurrence in teenagers. Although pornography use had been identified as a factor associated with DVV (Raiford et al., 2007; Rostad et al., 2019; Rothman & Adhia, 2016), to our knowledge, this is the first study that examined pornography and DVV longitudinally and bidirectionally, among a large and diverse sample of adolescents. Our results highlight some small associations at the cross-sectional level, but an absence of longitudinal links between pornography use and DVV, suggesting that youth's pornography use may not have long-term effects on DVV. These results provide additional insight and offer more nuance regarding the potential impact of pornography use on DVV. Our findings support the notions of the statements from Puglia

and Glowacz (2015), suggesting not to think of pornography use solely as a risk factor, but instead to focus on the development of critical reflexivity about pornography, since sexually explicit media is now integrated into the lives of a large proportion of adolescents (Andrie et al., 2021; Peter & Valkenburg, 2016).

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Table 1*Descriptive Statistics of Pornography and Dating Violence Victimization at Time 1 by Gender*

Variables	Boys (<i>n</i> = 645-744) M (SD)/%	Girls (<i>n</i> = 422-795) M (SD)/%	Non-Binary (<i>n</i> = 5-7) M (SD)/%
Age at first pornography use ^a	11.68 (1.64)	12.71 (1.58)	11.80 (0.84)
Pornography use frequency	3.91 (1.94)	1.05 (1.56)	1.43 (1.40)
Psychological DVV	36.0%	41.6%	42.9%
Physical DVV	7.3%	3.8%	28.6%
Sexual DVV	2.9%	9.5%	0.0%

Note. ^aOnly adolescents who had watched pornography before reported their age at pornography use (boys = 678; girls = 422; non-binary = 5).

Table 2

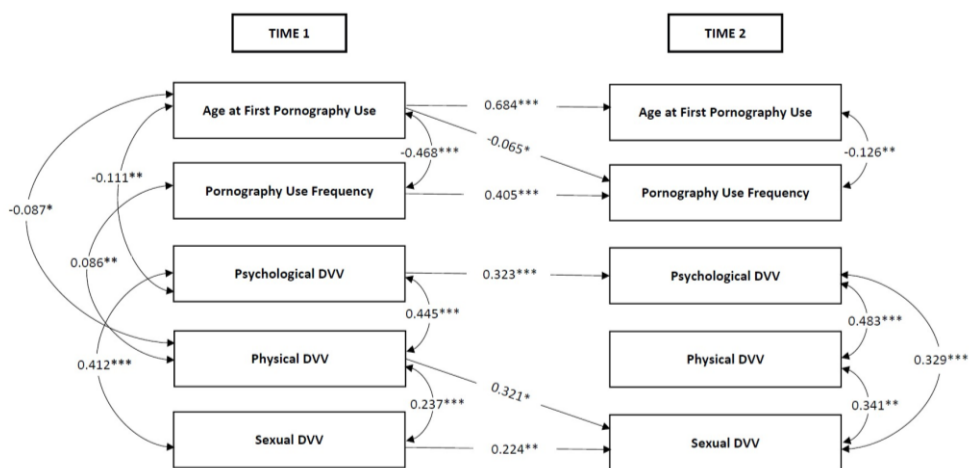
Descriptive Statistics and Correlations Between Age at First Pornography Use, Pornography Use Frequency, Forms of DVV, and Control Variables

	M (SD)	Range	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.
1. T1 Age at first pornography use ^a	12.08 (1.69)	6-16	-											
2. T2 Age at first pornography use ^a	12.38 (1.83)	6-17	.68**	-										
3. T1 Pornography use frequency ^b	2.43 (2.26)	0-7	-.41**	-.39**	-									
4. T2 Pornography use frequency ^b	2.71 (2.20)	0-7	-.33**	-.36**	.72**	-								
5. T1 Psychological DVV ^c	0.15 (0.29)	0-2.50	-.10**	-.08	.04	.02	-							
6. T2 Psychological DVV ^c	0.18 (0.32)	0-2.50	-.03	-.09*	.00	.02	.36**	-						
7. T1 Physical DVV ^c	0.05 (0.26)	0-3	-.09**	-.01	.08**	.01	.45**	.25**	-					
8. T2 Physical DVV ^c	0.04 (0.23)	0-3	-.03	-.11**	.04	.07	.17**	.51**	.32**	-				
9. T1 Sexual DVV ^c	0.05 (0.24)	0-3	-.05	-.07	.00	.02	.42**	.13**	.24**	.11*	-			
10. T2 Sexual DVV ^c	0.06 (0.27)	0-3	-.00	-.01	-.10**	-.06	.23**	.36**	.37**	.39**	.34**	-		
11. T2 Masturbation frequency ^d	4.68 (2.21)	1-8	-.20**	-.24**	.59**	.73**	.01	-.01	-.01	.04	.02	-.07	-	
12. COVID-19 status ^e	0.41 (0.49)	0-1	.04	.10*	-.07*	-.06	-.02	.01	.05	-.04	.02	.04	.02	-

Note. ^aOnly adolescents who had watched pornography before reported their age at pornography use (T1 n = 1105; T2 n = 701). ^b0 = never, 1 = less than 1 time per month, 2 = 1 time per month, 3 = 2–3 times per month, 4 = 1 time per week, 5 = many times per week, 6 = 1 time per day, 7 = many times per day. ^c0 = never, 1 = seldom (1-2 times), 2 = sometimes (3-5 times), 3 = often (6 times or more). ^d1 = not once in the past three months, 2 = less than once a month, 3 = once a month, 4 = 2-3 times a month, 5 = once a week, 6 = several times a week, 7 = once a day, 8 = more than once a day. ^e0 = data collection before COVID, 1 = data collection after COVID. *M* = mean; *SD* = standard deviation; T1 = Time 1 data collection; T2 = Time 2 data collection; *DVV* = dating violence victimization. **p* < .05. ***p* < .01

Figure 1

Auto-Regressive Cross-Lagged Analysis of Dating Violence Victimization, Age at First Pornography Use, and Pornography Use Frequency



Note. This figure demonstrates the associations between pornography use and dating violence victimization, controlling for masturbation frequency and COVID-19 status. Significant associations are depicted with solid black arrows. Coefficients are standardized regression coefficients.

* $p < .05$, ** $p < .01$, *** $p < .001$

Supplementary Material

Table S1

Estimates of the Associations Between Pornography and Dating Violence Victimization

	Estimate	S.E.	Est./S.E.	p
T1 Age at first pornography use				
T1 Pornography use frequency	-0.468	0.026	-17.871	< 0.001
T1 Psychological DVV	-0.111	0.038	-2.957	0.003
T1 Physical DVV	-0.087	0.041	-2.143	0.032
T1 Sexual DVV	-0.051	0.040	-1.285	0.199
T1 Pornography use frequency				
T1 Psychological DVV	0.040	0.028	1.426	0.154
T1 Physical DVV	0.086	0.026	3.373	0.001
T1 Sexual DVV	0.005	0.028	0.185	0.853
T1 Psychological DVV				
T1 Physical DVV	0.445	0.065	6.902	< 0.001
T1 Sexual DVV	0.412	0.056	7.357	< 0.001
T1 Physical DVV				
T1 Sexual DVV	0.237	0.067	3.507	< 0.001
T2 Age at first pornography use				
T1 Age at first pornography use	0.684	0.036	19.234	< 0.001
T1 Pornography use frequency	-0.029	0.041	-0.716	0.474
T1 Psychological DVV	-0.025	0.037	-0.680	0.497
T1 Physical DVV	0.021	0.045	0.467	0.640
T1 Sexual DVV	-0.021	0.037	-0.570	0.569
T2 Pornography use frequency	-0.126	0.038	-3.330	0.001
T2 Psychological DVV	-0.075	0.054	-1.389	0.165
T2 Physical DVV	-0.105	0.058	-1.821	0.069
T2 Sexual DVV	-0.069	0.066	-1.039	0.299
T2 Masturbation frequency	-0.089	0.040	-2.209	0.027
T2 COVID-19 status ^a	0.043	0.027	1.578	0.115
T2 Pornography use frequency				
T1 Age at first pornography use	-0.065	0.027	-2.391	0.017
T1 Pornography use frequency	0.405	0.035	11.638	< 0.001
T1 Psychological DVV	-0.037	0.034	-1.082	0.279
T1 Physical DVV	0.052	0.040	1.305	0.192
T1 Sexual DVV	0.005	0.018	0.265	0.791
T2 Psychological DVV	0.030	0.034	0.868	0.385
T2 Physical DVV	0.025	0.034	0.734	0.463

T2 Sexual DVV	0.005	0.037	0.131	0.896
T2 Masturbation frequency	0.469	0.030	15.561	< 0.001
T2 COVID-19 status	-0.034	0.020	-1.672	0.095
T2 Psychological DVV				
T1 Age at first pornography use	-0.035	0.055	-0.629	0.529
T1 Pornography use frequency	-0.024	0.045	-0.524	0.600
T1 Psychological DVV	0.323	0.061	5.334	< 0.001
T1 Physical DVV	0.109	0.112	0.973	0.331
T1 Sexual DVV	-0.035	0.058	-0.600	0.549
T2 Physical DVV	0.483	0.070	6.867	< 0.001
T2 Sexual DVV	0.329	0.082	4.034	< 0.001
T2 Masturbation frequency	0.000	0.044	0.010	0.992
T2 COVID-19 status	-0.001	0.037	-0.019	0.985
T2 Physical DVV				
T1 Age at first pornography use	-0.001	0.036	-0.024	0.981
T1 Pornography use frequency	0.033	0.048	0.679	0.497
T1 Psychological DVV	0.055	0.075	0.735	0.462
T1 Physical DVV	0.284	0.177	1.602	0.109
T1 Sexual DVV	-0.001	0.050	-0.017	0.987
T2 Sexual DVV	0.341	0.120	2.835	0.005
T2 Masturbation frequency	0.018	0.043	0.412	0.680
T2 COVID-19 status	-0.057	0.036	-1.587	0.112
T2 Sexual DVV				
T1 Age at first pornography use	0.028	0.055	0.500	0.617
T1 Pornography use frequency	-0.069	0.052	-1.310	0.190
T1 Psychological DVV	0.002	0.072	0.027	0.978
T1 Physical DVV	0.321	0.161	1.997	0.046
T1 Sexual DVV	0.224	0.070	3.191	0.001
T2 Masturbation frequency	-0.023	0.051	-0.456	0.648
T2 COVID-19 status	0.001	0.036	0.017	0.986
T2 COVID-19 status				
T1 Age at first pornography use	0.059	0.039	1.528	0.127
T1 Pornography use frequency	-0.061	0.033	-1.852	0.064
T1 Psychological DVV	0.000	0.044	-0.006	0.995
T1 Physical DVV	0.075	0.057	1.311	0.190
T1 Sexual DVV	0.028	0.039	0.724	0.469
T2 Masturbation frequency	0.072	0.034	2.141	0.032
T2 Masturbation Frequency				
T1 Age at first pornography use	0.047	0.041	1.156	0.248
T1 Pornography use frequency	0.611	0.029	21.261	< 0.001

T1 Psychological DVV	-0.044	0.037	-1.215	0.225
T1 Physical DVV	0.014	0.051	0.282	0.778
T1 Sexual DVV	0.023	0.026	0.890	0.374

Note. ^a0 = data collection before COVID, 1 = data collection after COVID. T1 = Time 1 data collection; T2 = Time 2 data collection; DVV = dating violence victimization.

Conclusion de l'essai

Le présent essai avait pour objectif d'étudier les associations longitudinales et bidirectionnelles entre deux modalités de visionnement de pornographie (c.-à-d., l'âge au premier visionnement et la fréquence de visionnement), ainsi que la victimisation de VRI psychologique, physique et sexuelle à l'adolescence. Les associations transversales et les différences entre les genres étaient également considérées. De plus, les effets potentiels de la fréquence de masturbation ainsi que de la pandémie de COVID-19 ont été contrôlés.

Somme toute, les analyses réalisées, présentées dans le chapitre premier, mettent en lumière des relations transversales de faible magnitude, au T1, entre un âge plus jeune au premier visionnement de pornographie et la victimisation de VRI physique et psychologique, ainsi qu'entre une fréquence de visionnement de pornographie plus élevée et la victimisation de VRI physique. Toutefois, aucune relation longitudinale n'a été révélée entre l'âge au premier visionnement de pornographie, la fréquence de visionnement de pornographie et la victimisation de VRI. Ainsi, l'hypothèse selon laquelle un âge plus jeune au premier visionnement de pornographie et une fréquence de visionnement plus élevée seraient associés positivement avec la victimisation de VRI un an plus tard n'a pas été supportée. Le volet bidirectionnel des analyses a permis de constater également une absence de relation inverse (c.-à-d., les trois types de VRI au T1 n'étaient pas reliés aux deux modalités de visionnement de pornographie au T2).

Notre étude offre davantage de nuances à la littérature concernant les associations entre le visionnement de pornographie et la victimisation de VRI, qui était principalement constituée d'études transversales (Rostad et al., 2019; Rothman & Adhia, 2016). À notre connaissance, il s'agissait de la première étude examinant ces associations de façon longitudinale et bidirectionnelle, au sein d'un large échantillon d'adolescents provenant de milieux socio-économiques diversifiés.

Différentes hypothèses explicatives de nos résultats, ainsi que les forces et limites de notre étude, sont présentées dans la discussion du chapitre premier. Globalement, nos analyses permettent de constater que le visionnement de pornographie présente quelques associations avec le vécu de VRI à court terme, mais que ces impacts ne se maintiennent pas à travers le temps. Ces conclusions concordent avec les études transversales ayant découvert des liens entre ces variables (Rostad et al., 2019; Rothman & Adhia, 2016). Toutefois, nos résultats longitudinaux s'opposent à des résultats précédemment trouvés (Raiford et al., 2007), rapportant que le visionnement de pornographie prédit la victimisation de VRI chez des adolescentes afro-américaines, de façon longitudinale.

Des pistes de réflexion pour des études futures concernant les liens entre le visionnement de pornographie et la victimisation de VRI sont présentées dans le chapitre premier. Par exemple, il semblerait pertinent d'évaluer non seulement la fréquence de visionnement et l'âge au premier visionnement, mais également le contenu du matériel pornographique (p. ex., de nature violente ou non), de même que le type de pornographie

(p. ex., légale ou illégale, misogyne ou féministe). Toutefois, étant donné les résultats de notre étude, l'exploration d'autres facteurs de risques potentiels de la victimisation de VRI, comme l'utilisation des technologies de communication (Baker & Carreño, 2016) et le *sexting* (Van Ouytsel et al., 2021) pourraient être à prioriser.

Il est à noter que les résultats de l'étude de Paquette et al. (2023), ayant également été réalisée avec les données PRESAJ, portant sur les associations entre le visionnement de pornographie et l'appréciation corporelle, indiquent quelques associations transversales entre un visionnement de pornographie plus fréquent et un niveau plus bas d'appréciation de son corps, mais une absence d'association longitudinale. Bien que l'appréciation corporelle soit un construit différent de la victimisation de VRI, il est possible d'établir des ponts avec la théorie de l'auto-objectification (Fredrickson et al., 1998) mentionnée dans le chapitre premier. Ce concept représente la tendance des gens à mesurer leur valeur en fonction de leur apparence physique, souvent comparée à des standards de beauté irréalistes, et serait d'ailleurs associé à l'utilisation de médias sexuellement explicites (Karsay et al., 2018) et à la violence sexuelle (Franz et al., 2016). Nous pouvons supposer que les jeunes possèdent un regard suffisamment critique envers la pornographie pour que son visionnement n'atteigne pas de façon significative et permanente leur perception d'eux-mêmes et de ce qui est acceptable en relation. Ces éléments de réflexion concordent avec les propos de Puglia et Glowacz (2015), dont les résultats montrent que les utilisateurs et les non-utilisateurs de pornographie rapportent de façon semblable les conséquences négatives associées au visionnement de pornographie.

Ces autrices suggèrent que l'anticipation de ces effets négatifs reflètent possiblement une attitude critique envers la pornographie, qui pourrait réduire ses impacts.

Plutôt que de percevoir l'accès à la pornographie strictement en tant que facteur de risque pour le développement psychosexuel des jeunes, nous croyons qu'il serait pertinent de prioriser l'information à l'égard de ce type de contenu, d'autant plus qu'il est maintenant intégré dans l'exploration sexuelle de plusieurs adolescents (Andrie et al., 2021; Peter & Valkenburg, 2016). D'ailleurs, les résultats de Vandenbosch et Van Oosten (2017) dévoilent que l'éducation concernant la pornographie diminue la force de la relation entre l'utilisation de pornographie et les attitudes sexuelles stéréotypées, chez les filles et les garçons.

Ainsi, il semble essentiel d'aborder l'utilisation de pornographie dans l'éducation sexuelle, en adaptant le contenu au niveau développemental du jeune. Il importe également de demeurer attentif à la perception des adolescents par rapport à ces contenus, ainsi qu'à leur manière de les utiliser. Bien que cela n'ait pas été étudié dans le cadre du présent essai, il semble pertinent de retenir, pour de futures études, que des nuances importantes permettent de distinguer une utilisation problématique d'une utilisation non-problématique de pornographie. Malgré le fait qu'il n'y a pas de consensus dans la littérature concernant la définition de l'utilisation problématique de pornographie, celle-ci peut être évaluée comme faisant partie du *Trouble compulsif du comportement sexuel*, inscrit dans la 11^{ème} édition de la *Classification Internationale des Maladies*

(Organisation mondiale de la santé, 2023). Ainsi, il est possible de soupçonner une utilisation problématique de pornographie lorsqu'un jeune ressent un manque de contrôle à l'égard de son utilisation, et ce malgré une détresse significative ou un impact sur le fonctionnement dans les sphères de vie. Bóthe et al. (2021) ont validé un instrument de mesure de l'utilisation problématique de pornographie adapté à une population adolescente : *Short Version of the Problematic Pornography Consumption Scale in Adolescents (PPCS-6-A)* et ont identifié qu'environ 10% des participants étaient à risque d'utiliser la pornographie de façon problématique. Ce questionnaire pourrait constituer un outil fiable et valide pour des études futures, qui gagneraient à s'attarder davantage à cette distinction afin de mieux comprendre le visionnement de pornographie chez les jeunes. Effectivement, une meilleure compréhension de cette distinction pourrait permettre aux adolescents et aux adultes de leur entourage d'accorder une plus grande attention aux indices d'une utilisation problématique des médias sexuellement explicites et de solliciter l'aide d'un spécialiste, comme un sexologue/psychologue, afin d'éviter que cette pratique nuise au développement psychosexuel du jeune.

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Appendice A

Certification éthique

Cet essai doctoral a fait l'objet d'une certification éthique. Le numéro du certificat est 602.170.15 et a été émis le 25 septembre 2018.

