Understanding the origins and the development of rape and sexual aggression against women: Four generations of research and theorizing

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Abstract

Several hypotheses have been proposed to explain the origins and the development of rape and sexual aggression against women. For the most part, the first three generations of research and theorizing provided an inherently static view of the propensity among males to commit a sexual aggression, providing little information about the developmental processes involved in the origins and course of sexually aggressive behavior. This article provides a review of contemporary explanations of sexual aggression against women and an examination of the underlying developmental issues that these models imply. Given the emergence of longitudinal research on sexual aggression, these issues are then contrasted and compared with the relatively nascent body of knowledge about the origins and the development of sexual aggression over the life course. More specifically, in recent years a fourth generation of research and theorizing concerned by the developmental and life course factors conducive to rape and sexual aggression has emerged. This fourth generation proposes a more dynamic etiological framework to understand the origins and the development of sexually aggressive behaviors that is directed by men toward women. Emerging research from this generation highlight unresolved issues about, among other things, the understanding of the continuity and discontinuity of rape and sexual aggression over time as well as the developmental pathways leading to rape and sexual aggression.

Keywords: Developmental life-course, Longitudinal research, Propensity, Rape, Sexual aggression, Theory, Violence


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Four generations of research and theorizing

Several hypotheses and theories have been proposed to explain the etiology of rape and sexual aggression against women (e.g., Brownmiller, 1975; Groth & Birnbaum, 1979; Hall & Hirschman, 1991; Lalumière, Harris, Quinsey & Rice, 2005; Malamuth, 1998; Marshall & Barbaree, 1990; Knight & Sims-Knight, 2003; Quinsey, 1984). To date, most theories reflect a propensity-focused explanation of sexual aggression of women. Propensity models suggest the presence of a relatively fixed and stable trait that, in combination with situational and contextual factors, can lead some men to commit an act of sexual aggression against a woman. From this perspective, stable and fixed between-individual differences are associated with this propensity. Therefore, propensity theories of rape and sexual aggression provide information about the nature of these individual differences. Contemporary models have either stressed biological, personality, neuropsychological, cognitive, and/or sociocultural factors along these lines (e.g., Baumeister, Catanese & Wallace, 2002; Knight & Sims-Knight, 2003; Lalumière et al., 2005). The foci of these models, while providing some research directions and hypotheses, are not well-suited to explain the origins and developmental course of sexual aggression. More specifically, it is unclear whether these propensity models can account for offending patterns of sexual aggressors of women over the life-course. Indeed, contrary to ideas proposed by propensity theorists, sexual aggression is generally characterized by a high degree of discontinuity over the life course, albeit some continuity. Indeed, prospective longitudinal research has shown that sexual aggression is typically short-lived for most, and can be considered largely opportunistic and transitory (e.g., Lussier & Blokland, 2014; Zimring, Piquero, Jennings, 2007; Zimring, Jennings, Piquero, & Hays, 2009). In this article, therefore, it is argued that a more dynamic explanatory platform is required to account for both the continuity and discontinuity of sexual aggression over time. In
the current article, the key underlying assumptions about rape and sexual aggression are examined. Second, the necessity for a theory specifically explaining this behavior over and above a general explanation of crime and violence is explained. Third, contemporary explanatory models of sexual aggression are reviewed and compared. Finally, the current state of knowledge regarding the developmental life course (DLC) of rape and sexual aggression is described and contrasted with these contemporary models.

Rape and Sexual Aggression against Women

As part of this article, the reviewed explanatory theories of rape and sexual aggression will be limited to situations where the perpetrator is an adult male and the victim an adult female. While rape and sexual aggression are certainly not limited to instances involving an adult male perpetrator and an adult female victim (e.g., see Felson, 2002), this review focuses on this specific phenomena and we do not implicitly suggest that the conclusions drawn also apply to other instances. Aside from the highly-sensitive, emotionally laden, and sociopolitical aspects underpinning the phenomena, the term rape and sexual aggression remain controversial among social scientists for several reasons. From a legal standpoint, the terms ‘rape’ and ‘sexual aggression’ are considered misleading and problematic because they conflate acts in which the gravity, legality and moral acceptability differ dramatically (e.g., Bryden & Grier, 2011). Furthermore, until the 1980s, in North America, men who raped their wives were generally exempt from legal punishment (e.g., Martin, Taft & Resick, 2007). In fact, legal definitions of rape or “rape laws” are rarely used by social scientists for measurement purposes given that they greatly vary across jurisdictions and are often difficult to reconcile with behavioral issues of force and consent, more specifically with respect to marital rape (e.g., Basile, 2002; Baumeister, et al., 2002). In the scientific literature, sexual aggression includes a wide array of behaviors that have been referred to as sexual assault, rape, marital rape, date rape, sexual coercion, and sexual
violence. In fact, the field of research has been hampered by the presence of various definitions and operationalization when referring to these harmful behaviors (e.g., Muehlenhard, Powch, Phelps & Giusti, 1992). Therefore, many social scientists have come to view rape as a set of behaviors implying that there was vaginal intercourse involved in the absence of the victim's consent and some degree of force used by the assailant (e.g., Koss, 1993a). Rape can occur between strangers, acquaintances, intimate partners, dating partners, spouse, and family members (e.g., Casey & Nurius, 2005; Tjaden & Thoennes, 2000). Sexual assault refers to situations where an individual forces another person, against their will, to engage in some form of sexual contact. Unlike rape, sexual assault is not limited to situations where the perpetrator primarily attempts to or engages in sexual intercourse with the victim and includes a broad range of sexual behaviors. Sexual coercion is generally understood where non-physical tactics are used by the perpetrator, such as the abuse of power and authority, psychological pressure and deceitful tactics (e.g., Koss et al., 1987). Sexual aggression, therefore, encompasses any and all situations where the perpetrator has sexual contact with a victim without their consent, using tactics including, but not limited to physical force, threats, manipulation, or pressure (e.g., Koss, Gidycz & Wisniewski, 1987). Researchers often suggest that sexual aggression reflects a continuum of behavioral manifestations, but that continuum has been rarely conceptually defined, explicitly presented, and empirically examined (e.g., see Koss, Abbey, Campbell, Cook et al., 2007; Muehlenhard et al., 1992).

Theoretical Specificity of Rape and Sexual Aggression against Women

Theories of rape and sexual aggression against women have evolved considerably over the years. The evolution of these theories has been accompanied by several debates and controversies about the key underlying mechanisms responsible for rape and sexual aggression (e.g., Adler, 1984; Briere & Malamuth, 1983; Harris, Mazerolle, & Knight, 2009; Langevin,
Lussier et al. (2005a, 2005b) highlighted the presence of three main theoretical perspectives. The first perspective, and also the most longstanding and influential among the scientific community, involves specialized theories of rape and sexual aggression (e.g., Abel et al., 1987; Groth & Burgess, 1977). According to these theories, sexual aggressors of women represent a distinct group of offenders who are characterized by a specific propensity for sexual aggression. This theoretical perspective has emerged mainly from the disciplinary areas of psychology and psychiatry. Advocates of this approach have argued that criminological theories and related criminal justice responses to general offending are largely inadequate to explain sexual aggression and to deter these men from sexually offending/reoffending. From this perspective, it is believed that there are significant between-individual differences among sexual aggressors and nonsexual aggressors especially along the domains of sexual development, mental health, and psychological functioning. For example, these models emphasize the role and importance of inappropriate sexual modeling, early aversive sexual experiences during childhood (i.e., child sexual abuse), the onset and the development of deviant sexuality as a result of these experiences, the role of sexual interests and preferences, as well as false beliefs about sexuality and women (e.g., Laws & Marshall, 1990). From this standpoint, however, there is still a lack of consensus as to whether sexual aggression against women is best explained by such a specific etiological model focused on sexual aggression against women, or, by a more general model of sexual offending that also encompasses other sexually deviant behaviors such exhibitionism, voyeurism, sexual abuse of children, etc. (e.g., Freund & Seto, 1998; Ward & Beech, 2006). While specialized theories of sexual aggression have had the most substantial impact among the scientific community and in the intervention and treatment context, they have been challenged over the years by theoretical development (e.g., Felson, 2002; Malamuth, 1998) and empirical evidence about the criminal careers of men having
committed a rape/sexual aggression (e.g., Lussier, LeBlanc & Proulx, 2005a; Lussier, 2005; Simon, 2000; Harris et al., 2009).

The second perspective involves the application of general theories of crime and delinquency to explain rape and sexual aggression against women (e.g., Harris et al., 2009; Lussier et al., 2005b). This approach is based on the premise that the etiology of sexual aggression against women is virtually the same as the etiology of nonsexual criminal behavior. This is the primary theoretical viewpoint generally shared and supported by scholars from the fields of criminology and sociology (e.g., see Felson, 2002; Gottfredson & Hirschi, 1990). Arguably, the early premise for the emergence of general explanations goes back to the seminal work of Gebhard, Gagnon, Pomeroy and Christenson (1965) who noted many striking similarities between sexual aggressors of women and other adult nonsexual offenders (see also Marshall & Barbaree, 1984). These early observations and conclusions would eventually be influential to the work of several scholars including Adler (1984) who questioned whether sexual aggressors of women were ‘sex offenders’ or simply violent offenders (e.g., see also Delisi, 2001; Tedeschi & Felson, 1994). Later, Simon (1997) pursued this argument by questioning the rationale of the sex offender label for these particular individuals considering the vast array of nonsexual offenses that typically characterized their criminal histories. Proponents of this approach emphasize the similarities observed across studies between sexual aggressors of women and other offenders who have committed nonsexual crimes (e.g., Fanniff, Schubert, Mulvey, Iselin & Piquero, 2016; McCuish, Lussier & Corrado, 2015a). From this perspective, a general criminal propensity or antisocial tendency manifests itself in different contexts and situations, including interpersonal, intimate, and sexual relationships. In other words, the key factors and mechanisms associated with the commission of any crime, such as assault, burglary, or theft, for example, ought to explain rape and sexual aggression against women. Therefore, sexual aggression is not primarily
the symptom of a specific sexual malfunction or sexual deviance, but rather simply another manifestation of a general propensity toward a preference for risky, thrilling and novel sensations, and a here-and-now, short-term orientation with an inclination for immediate gratification in spite of the likelihood for long-term negative consequences for themselves (e.g., Gottfredson & Hirschi, 1990). Critically, this perspective, is somewhat difficult to reconcile with empirical observations regarding persistent sexual aggressors of women and the role and importance of risk factors that are specific to sexual aggression (e.g., Hanson & Bussière, 1998).

The third perspective involves the integration of concepts and ideas from both the general and specialized approaches (Lussier et al., 2005b). From this perspective, either approach taken separately will be incomplete to explain the offending behavior of sexual aggressors of women. For example, it is abundantly clear that there are key similarities and differences between sexual aggressors of women and individuals who have never committed an act of sexual aggression against a woman (e.g., Knight & Sims-Knight, 2003; Malamuth, 2003; Marshall & Barbaree, 1984). These similarities and differences, however, can be theoretically formulated by integrating factors from both the general explanations of crime and delinquency and those to do more specifically with rape and sexual aggression. This perspective, therefore, recognizes the importance of taking into consideration certain criminogenic factors such as impulsivity and poor self-control, attitudes and antisocial distortions, the impact of substance use and abuse, and the influence of antisocial peers (e.g., Andrews, Bonta, & Wormith, 2006; Lussier et al., 2005b; Harris et al., 2009). Alone however, according to this perspective, criminogenic factors are insufficient to provide a comprehensive explanation of sexual aggression against women; they do not uniquely explain or differentiate sexual aggressors from nonsexual aggressors (e.g., see Lussier & Blokland, 2014; Vega & Malamuth, 2007). Therefore, it is necessary to supplement general criminogenic factors with unique factors associated with sexual abuse, such as sexual
regulation and cognitive distortions supportive of sexual aggression, for example (Beech & Ward, 2004). While this perspective highlight the role and importance of both general and specific factors to explain rape and sexual aggression, it is unclear whether general and specific factors explain the behavior of all men having committed a rape/sexual aggression or that some men's behavior might be the result of a general propensity to be involved in antisocial/criminal behavior (including rape and sexual aggression) while for others, risk factors specific to rape and sexual aggression are operating.

Theoretical formulations of rape and sexual aggression: Three generations of research

The general versus specific explanation debate regarding the origins and the development of rape and sexual aggression is reflective of more profound changes that have characterized this field of research over the years. This debate, it is argued, is the result of significant changes regarding how researchers in the field have formulated the problem and conducted research on the issue. Indeed, it is suggested that over the years, the study of the etiology of rape and sexual aggression has been characterized by the presence of three influential generations of research and theorizing, and the recent emergence of a fourth generation. The first three generations of research and theorizing have all had a very significant impact on the conceptualization of rape and sexual aggression, and as a result, on the development and implementation of very distinctive social and criminal justice policies in response to rape and sexual aggression. In this section, these three influential generations of research and theorizing are briefly described while the fourth and emerging generation will be addressed later in a subsequent section.

First Generation of Research and Theorizing – The Clinical-Medical Approach

The first generation consisted of empirical research conducted with sexual aggressors of women in either prison, psychiatric, or treatment settings (e.g., Abel and Rouleau, 1990; Gebhard et al., 1965; Knight & Prentky 1990). One of the primary goals of research in this context was to
inform the judgments of clinicians and practitioners in determining the motivation of the offenders, and, helping to identify possible treatment targets, screen offenders exhibiting sexual deviance, and to adjust interventions accordingly. First and foremost, this generation of research is responsible for introducing scientific inquiry, measures and measurement as well as hypothesis testing to a field that was, up to that point, predominantly characterized by the clinical observations and description of a few, very selective cases (e.g., Krafft-Ebing, 1907). This first generation of research is also responsible for identifying the heterogeneity among individuals having committed sexual aggression against adult women, especially in terms of the various motivations characterizing these men (e.g., Groth and Birnbaum, 1979; Knight & Prentky, 1990). This generation of research also raised concerns about the limitations of official police data to determine the extent of sexual aggressions committed by these men (e.g., Abel, Becker, Mittelman, Cunningham-Rathner, Rouleau, & Murphy, 1987; Weinrott & Saylor, 1991). While sex offender treatment programs have considerably evolved over the years, this generation of research also stressed the importance of providing professional assistance, conducting rigorous clinical assessment, and offering specialized treatment to sexually aggressive men while promoting rehabilitation objectives and services (e.g., Marshall, 1996). Therefore, the first generation of studies along these lines were limited to the examination of individuals who have been arrested, indicted/convicted and in most cases incarcerated for their acts of sexual aggression.

Considering the issue of attrition in the criminal justice system, particularly for cases involving of rape and sexual aggression, it is extremely difficult to generalize the findings from these studies to all individuals who have committed such acts (Daly & Bouhours, 2010). In addition, this generation of studies was characterized by relatively limited methodological quality, and was typically based on clinical observations, cross-sectional and retrospective data.
In effect, these and other methodological limitations did not allow researchers to distinguish between causes, correlates, and consequences of rape and sexual aggression (e.g., the presence of deviant sexual fantasies, the presence cognitive distortions supportive of sexual aggression). Tests, questionnaires, psychometric instruments, and the penile plethysmograph were some of the primary tools used to describe this particular population of offenders (e.g., Langevin, 1985; Quinsey, 1984), some of which are still used in clinical and correctional settings (e.g., see Thakker, Collie, Gannon & Ward, 2008). This generation of studies focused on individual differences and the presence of men's mental health problems, including personality disorders, the presence of paraphilia, psychopathy, etc. Furthermore, the early clinical research often did not involve comparison groups of nonsexual aggressors, therefore not allowing researchers to draw firm generalizable conclusions about research findings.

The Second Generation of Research and Theorizing: The Sociolegal Approach

A second generation of studies emerged primarily during the early 1980s that shifted focus toward the general population. This body of research challenged the assumption of mental health problems underlying the behavior of individuals having committed acts of sexual aggression (e.g., Bachman, Paternoster & Ward, 1992; Brownmiller, 1975; Burt, 1980; Malamuth, 1989). These studies, conducted by mainly sociologists, social psychologists and feminists, described sexual aggressors of women as rational individuals whose sexual aggression was not reflective of sexual deviance requiring a clinical intervention, but rather was symptomatic of cultural influences supporting the development of violent predispositions, particularly toward women, and therefore, requiring punishment and deterrence. By conceptualizing rape and sexual aggression as a social problem rather than a mental health problem, this second generation of research was instrumental in: (a) triggering several key criminal justice changes (e.g., rape laws) and broadening the scope of legal sanctioning (e.g., marital rape) (e.g., Lieb et al., 1998;
Petrunk, 2002); (b) raising greater awareness toward victims of rape and sexual aggression and secondary victimization, increasing the understanding of the negative short-term and long-term impact of sexual aggression, and highlighting the inadequacies of the criminal justice system responding to such victimization (e.g., Campbell & Raja, 1999; Kilpatrick, Best, Saunders, & Veronen, 1988); (c) identifying key risk factors and groups at-risk for the perpetration of rape and sexual aggression, as well as sexual victimization (e.g., Koss, 1993a; Malamuth et al., 1991; Schwartz, DeKeseredy, Tait & Alvi, 2001).

This second generation of studies focused on self-reported data to measure sexual aggression toward women because these incidents are largely under-reported by police data (e.g., Bryden & Lengnick, 1997; Bouchard & Lussier, 2015; Koss, 1993b; Lussier & Cale, 2013). In other words, these studies stressed that the prevalence of sexual aggression was much higher than official data suggested (e.g., Koss et al., 1987). Studies were carried out mainly with samples of young adults, usually college and university students, considered to be the age group the most at risk of perpetration and victimization. These studies, however, do not include official data or other data allowing triangulation and validation of self-reported information which may involve minimization, recall biases or exaggeration. The picture emerging from these studies stands in stark contrast from research conducted with sexual aggressors of women in clinical settings. It could be argued that these second generation studies were limited to the description and explanation of the phenomenon of date rape and, as a result, was not representative of all forms of sexual aggression against women. Although this criticism is certainly justified, it is important to reiterate that most sexual aggression against women typically occurs in a context where the perpetrator and the victim are relatively well acquainted (e.g., Fisher, Cullen & Turner, 2000). Furthermore, some acts included in the operational definition of sexual aggression typically used in second-generation studies would not necessarily be considered criminal in a court of law (e.g.,
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Bryden & Lengnink, 1997). Finally, these studies did not put as much emphasis on individual differences associated with sexual aggression, instead emphasizing the role and importance of contextual and transitory factors, including alcohol consumption and intoxication, the routine activities and opportunities, the presence and availability of pornographic material, male peer support, rape myths and false beliefs about women and sexuality, as well as deviant sexual arousal (e.g., Baron & Straus, 1987; Koss, Leonard, Beezley, Oros, 1985; Malamuth, 1989; Malamuth, 1998; Schwartz et al., 2001; Schwartz & DeKeseredy, 1997). Given the reliance on cross-sectional and retrospective data, again, this generation of studies was also not supported by research designs allowing for the distinction between causes, correlates, and consequences but it highlighted broader key concepts and factors associated with the sexual aggression of young adult females by young adult males.

The Third Generation of Research and Theorizing: The Correctional-Psychology Approach

A third generation of research emerged in the early 1990s and focused on the long-term risk of convicted sexual aggressors. While the second generation of research demonstrated how widespread, domesticated, and more common rape and sexual aggression were than originally thought, this new research program aimed to better understand the persistence of sexual aggression over time through the inspection of recidivism patterns of convicted offenders. This correctional psychology approach, for the most part, has not been driven by a particular theoretical framework, but rather, aimed to identify risk factors associated with sexual recidivism. While theoretical models of sexual recidivism have been elaborated and proposed, these models were not specific to individuals involved in rape and sexual aggression against women (e.g., Proulx et al., 2014; Ward & Beech, 2006). This generation of research more or less introduced longitudinal research into the field by examining: a) the proportion of individuals being re-arrested or reconvicted for a sexual offense after their release (e.g., Hanson, Morton & Harris,
2003); b) the characteristics of individuals re-arrested for a sexual offense after their release compared to those who were not rearrested for such offenses (e.g., Beech & Ward, 2004); and, c) through statistical modeling, whether identified risk factors for sexual recidivism could be used for risk assessment and risk prediction purposes (e.g., Quinsey, Rice & Harris, 1995). While the theorizing of persistence of rape and sexual aggression against women has been limited, researchers associated with this line of research reiterated the importance of historical (i.e., static risk factors), trait-like features (i.e., dynamic risk stable factors), as well as contextual, transitory, state-like factors (i.e., dynamic acute risk factors) associated with sexual recidivism (e.g., see Hanson & Thornton, 2000; Hanson & Harris, 2000). While these researchers stressed the importance of dynamic and changeable risk factors, the dynamic aspect of these risk factors of sexual recidivism has rarely been examined and empirically verified.

In this context, sexual aggression was again defined and measured using official data (e.g., a new arrest or conviction) and thus accompanied by the associated limitations that characterize official data which include the underestimation of the true sexual recidivism rate (e.g., Quinsey, Rice & Weis, 1986). This line of research helped to establish the official base rate of sexual recidivism among convicted sexual aggressors, but also, demonstrated the wide variation of sexual recidivism rates among subgroups of men convicted of rape and sexual aggression against women. Of importance, the inspection of recidivism patterns through longitudinal data provided evidence that recidivism rates vary by age (e.g., Wollert, 2006; Wollert, Cramer, Waggoner, Skelton, & Vess, 2010). While there is ample evidence showing that the sexual recidivism rates of older offenders are significantly lower than those of young adults, it remains unclear whether the risk of sexual recidivism drops with age and aging for most (e.g., Lussier & Healey, 2009). The conundrum surrounding the interpretation of the age effect remained considering that researchers were only looking at a relatively small snapshot of these
individuals' life histories, which was restricted to the amount of time covered by the study follow-up period (i.e., usually 4 to 5 years). Not only were these follow-up periods relatively short, especially to establish the long-term risk of sexual recidivism, but these longitudinal studies also combined individuals at different stages of their criminal career (e.g., first offense, second offense, etc.), and also at different life stages (emerging adulthood, midlife, etc.) (Lussier & Cale, 2013). In other words, this generation of studies was not well suited to examine life-course patterns, but was also too limited to examine within-individual stability and changes over time and context. Amid these limitations, this generation of research contributed to the longitudinal understanding of sexual aggression and can be considered an important precursor to the fourth generation of research on the issue.

Explanatory Models of Sexual Aggression against Women

The first three generations of research and theorizing led to the development of several etiological models of rape and sexual aggression. These first three generations were heavily focused on the presence of individual differences associated with rape and sexual aggression. In this section, the key etiological factors and mechanisms focusing on these individual differences are reviewed.

Motives for Sexual Aggression

Historically, one of the most disputed aspects of the phenomena of rape and sexual aggression against women has been the motivation of the perpetrator. The motivation refers to the aim or aims pursued by a perpetrator who commits an act of sexual aggression against a woman. This raises the important question: Are sexual aggressors of women motivated by the need for sexual pleasure and gratification or by some other motivations that have little to do with sexuality? For some, sexual aggression is an act motivated by sexual drive, whether deviant sexual fantasies and sexual urges (e.g., Abel & Blanchard, 1974), an abnormally high sexual
drive (e.g., Ellis, 1991; Kafka, 1997), or a normal sexual drive not governed by common behavioral inhibitory mechanisms (Marshall & Barbaree, 1984). For others, sexual assault is a pseudosexual act where sexual behavior is a means to another end (Groth & Birnbaum, 1979). From a feminist standpoint, sexual aggression is a strategy aimed toward maintaining women in a position of social and economic subjugation and to maintain the power relations associated with patriarchy. Therefore, from this perspective, domination, power, and control are the main motivations behind sexual aggression where sexual behaviors contribute to further humiliate and reinforce the subjugation of women. For example, Brownmiller's (1975) observations, based mainly on wartime contexts and the period of slavery in the United States, confirmed for her that sexual aggression is a process of intimidation by which all men keep women in a state of fear. Sexual aggression can therefore serve a purpose other than obtaining sexual gratification. Using the same logic, Groth & Birnbaum (1979) stated that any conclusions or interpretation of sexual aggression involving a sexual motivation would suggest that the victim deliberately or inadvertently caused her own victimization. Their argument however seems to imply that for moral, social, and political reasons, the interpretation of a harmful behavior should be made in a particular way. These interpretations and conclusions, popularized during the 1970s and 1980s, have been questioned and the underlying assumptions challenged on several fronts (e.g., Ellis, 1991; Felson, 2002; Lalumière et al., 2005). As suggested by Bryden and Grier (2011), the rejection of any sexual motivation underlying sexual aggression was the result of a generation aiming to raise awareness and change public perceptions and attitudes toward this emotionally charged crime.

For many clinical researchers, however, the answer is rather obvious: there are a variety of motivations behind rape and sexual aggression that can only be highlighted by a classification system or a typology. Over the years, several typologies of sexual aggressors of women have
been formulated (Cohen, Garofalo, Boucher & Seghorn 1971; Gebhard, et al., 1965; Guttmacher & Wiehofen, 1952; Groth & Birnbaum, 1979; Knight & Prentky 1990; Proulx et al., 1999).

Among the motives for rape and sexual aggression raised by these typologies include but are not limited to: sexual sadism; the desire to dominate others completely; unconscious homosexual anxieties; opportunism and immediate sexual gratifications; hostility; anger and rage; and, power and control. Not surprisingly, these classifications models and interpretations of offenders' underlying motivations tend to differ from one study to the next. For the most part, these classification schemes are characterized by an inferential approach, rarely the subject of much empirical assessment and validation (see for a discussion, Knight & Prentky, 1990). At the same time, determining the motivation for an act of sexual aggression requires a much higher level of inference than for describing differences between sex crime events. For example, it still remains unclear if a person's motivation to commit an act of sexual aggression remains the same over time/offenses and across victims. Furthermore, any analysis, interpretation and conclusions along these lines have been based on retrospective data obtained after the fact, and typically in a therapeutic setting. Given these challenges, it is not necessarily surprising that the classification of offenders based on their motivation to commit an act of sexual aggression has been left to the wayside, at least for the most part. In their place, to some extent, more contemporary classification schemes of sexual aggressors of women are now focused on offenders' modus operandi and the crime event characteristics (Deslauriers-Varin & Beauregard, 2010; Proulx, Beauregard, Lussier & Leclerc, et al., 2014; Polaschek, Hudson, Ward & Siegert, 2001), developmental and offending trajectories (Cale, Lussier & Proulx, 2009; Lalumière et al., 2005; Lussier, et al., 2010; Lussier, Leclerc, Cale & Proulx, 2007; Lussier, et al., 2012; Seto & Barbaree, 1997) and the risk of sexual recidivism (e.g., Hanson & Thornton, 2000), and the distinct processes associated with sexual reoffending (e.g., Ward & Hudson, 2000).
Until recently, our understanding of the motives for sexual intercourse more broadly have been generally limited to reproduction, sexual pleasure, or to release sexual tension. There is, however, some research suggesting that the motives for having sex are much more widespread. For example, Hill and Preston (1996) proposed a model consisting of eight motives for sex which included: to feel valued; to demonstrate value; to obtain relief from stress; to provide nurturance; to enhance feelings of personal power; to experience the power of one's partner; to experience pleasure; and, to procreate. More recently, using a survey with university students, Meston and Buss (2007) broadened this view by identifying thirteen different motives for sex grouped according to four key domains. Hence, stress reduction, pleasure, physical desirability and experience seeking constitute the domain of physical motives. The domain of goal attainment refers to resources, social status, revenge and utilitarian motives. Insecurity is the third domain which includes boosting self-esteem, having sex out of duty and pressure, and ‘mate guarding’ (e.g., to prevent someone from leaving the relationship). Finally, the last domain refers to emotional factors, such as love, commitment, and expression. In their study, the most frequent motives for sexual intercourse included attraction, pleasure, love, emotional closeness, arousal and adventure. Their findings suggested that men, more so than women, endorsed factors such as experience seeking (e.g., wanting to increase the number of sexual conquests), opportunity (e.g., the person was available), revenge (e.g., I wanted to get even with someone), boosting self-esteem (e.g., wanting to feel powerful) and desiring physical pleasure without emotional involvement.

Interestingly, the motives for sex identified with survey research conducted with samples of university students such as in the study of Meston and Buss are not so far removed from motives for sexual aggression that have been reported in the studies conducted with men convicted for rape and sexual aggression. In other words, what clinical researchers identified as
key pseudosexual motives for rape and sexual aggression are also reported by the general population as motives for sexual intercourse. While this survey research did not compare the motives of sexual aggressors from non-aggressors, a key difference characterizing sexual aggressors of women therefore seems to be the pursuit of sex in the absence of consent, and in these circumstances, attaining the goal of achieving sexual encounters by using reckless, defiant, covert or overt antisocial tactics. Research along these lines has been conceptualized by evolutionary psychologists using concepts such as mating effort.

The Phylogenetic Origins of Sexual Aggression

Another set of theoretical formulations regarding the origins of sexual aggression and rape originate from sociobiology and evolutionary psychology (e.g., Ellis, 1991; Lalumière & Quinsey, 1996; Lalumière et al., 2005; Thornhill & Palmer, 2000). Within this line of investigation, researchers have examined two main hypotheses: a) whether rape provides increased chance for the survival of genes; or, b) whether rape is a by-product of sexual selection. To date, research findings tend to support the latter of the two scenarios. According to the hypothesis that rape is a by-product of sexual selection, males can be distinguished in terms of their mating effort where differential strategies are used to maximize the likelihood of their reproductive success and survival of their genes. On the one hand, a short-term mating (SM) strategy refers to a high investment in pursuing multiple partners and low investment and commitment in protecting, providing resources, and raising offspring. On the other hand, those characterized by a long-term mating (LM) strategy manifest much higher commitment and parental investment in their offspring. Therefore, from this perspective, males pursuing a SM strategy are likely to encounter difficulties mating given that their strategy conflicts with those of females who tend to be characterized by a LM strategy.
Contrary to popular beliefs that sexual aggressors of women to be socially incompetent, unpopular men, characterized by a low self-esteem, much empirical research tends to show quite the opposite. These men tend to have an earlier onset of sexual intercourse and more sexual partners than other sex offenders (e.g., Cale, Leclerc & Smallbone, 2014). Furthermore, while not all sexual aggressors of women can be characterized by a SM strategy, those who are stand more likely to start offending at an earlier age and appear to commit acts of sexual aggression at a higher rate (Cale & Lussier, 2011). There is also additional research evidence that demonstrates men who are more antisocial and to some extent, show evidence of psychopathy, tend to be characterized by this type of a sexual lifestyle and mating strategy (Harris, Rice, Hilton, Lalumiere & Quinsey, 2007). One possible explanation on the SM-sexual aggression link might be males' motives for sexual activities in general. For example, recent research shows that SM and LM males' motivations for sex overlap on some domains, but are quite distinct on others. A study by Kennair, Grøntvedt, Mehmetoglu, Perilloux & Buss (2015) produced evidence to suggest that LM are more likely to be driven by love and commitment compared to SM, who were generally more likely to be driven by experience seeking, status, revenge, and mate guarding motives. In other words, the SM males' motives for sex correspond to motives that are commonly reported for nonsexual offenses, such as intimate partner violence, homicide, dangerous driving, assault, etc. (e.g., Gottfredson & Hirschi, 1990; Tedeschi & Felson, 1994; Felson, 2002). The overlap of such motives may explain, at least in part, the co-occurrence of sexual aggression against women with nonsexual antisocial behaviors as well as nonsexual criminal behaviors in the life history of these men (e.g., Adler, 1984; Lussier et al., 2005a; Simon, 2000).
Propensity Models of Sexual Aggression

A more common theoretical perspective to explain sexual aggression involves the description of a propensity specifically associated with sexual aggression. This propensity approach suggests the presence of trait-like features that are relatively stable and fixed over time and increase a person's likelihood of committing an act of sexual aggression under certain circumstances or in certain situations. Several models have been proposed to describe and explain such propensity along the lines of: a) deviant sexual preferences; b) personality traits and disorders; c) neuropsychological processes; and, d) attitudinal and cognitive biases.

*Deviant sexual preferences.* Explanatory models involving deviant sexual preferences suggest that individuals who commit acts of sexual aggression are more sexually aroused by these type of non-consensual sexual interactions more so than normative consensual sexual activities. Different hypotheses have been proposed to explain the emergence of deviant sexual preferences for sexual aggression, using mainly key concepts from behavioral approaches and conditioning mechanisms in addition to social learning principles (e.g., Abel & Blanchard, 1974; Laws & Barbaree, 1990). Laboratory studies have been conducted to test such hypotheses using penile plethysmography. The penile plethysmograph consists of measuring the change in penile circumference (or volume) during the presentation of deviant and non-deviant sexual stimuli (e.g., Proulx, 1989). The results of such laboratory studies suggest that only a minority of sexual aggressors of women sentenced for their sexual offenses have a sexual preference for rape or sexual assault with physical violence. However, this proportion increases in clinical and psychiatric samples (Michaud & Proulx, 2009). This type of sample variation is expected as individuals with evidence of deviant sexual preferences are more likely to be transferred to a psychiatric hospital to take part in specialized sex offender treatment programs.
The discriminant validity of penile plethysmography, or the ability of the instrument itself to distinguish the penile responses of men having committed an act of sexual aggression from those who have not, has been the subject of much debate (e.g., Marshall & Fernandez, 2000; Lalumière, Quinsey, Harris, Tautrimas, 2003). The findings from research along these lines has not consistently reported differential penile responses between the two groups, and this has raised questions about whether these inconsistent findings challenge the deviant sexual preference hypothesis itself, or rather reflect a limitation of the methodology used in these studies. There is however some evidence to suggest that in laboratory settings when men are exposed to stimuli (i.e., short audiotaped description of rape and sexual aggression) that are more severe and include elements of humiliation, the discriminant validity of this method increases (Proulx, Aubut, McKibben & Côté, 1994). There are two prevailing explanations for these findings. The first is that sexual aggressors of women characterized by sexual sadism have differential penile response patterns than other men, including non-sadistic sexual aggressors. The second is that samples including a larger proportion of sexual sadists are more likely to report increased discriminant validity on the plethysmograph.

The reality, however, is likely much more complicated than one explanation over the other. Laboratory studies rarely take into account contextual factors that can temporarily change sexual arousal, including impulsivity, mood, attitudes, emotional states (e.g., anger, rage), cognitive distortions, and situational characteristics such as alcohol and drug intoxication, among others (Hall & Hirschman, 1991; Marshall & Barbaree, 1990). Critically, in certain contexts, disinhibitory mechanisms such as these may: (a) promote or increase sexual excitement despite the refusal and distress of the victim; and/or, (b) reduce the effect of internal mechanisms governing inhibitions against sexual assault (Barbaree & Marshall, 1991). Therefore, these empirical findings challenge the background role and importance of sexual preferences of the
offender, bringing to the forefront individual differences in personality, attitudes and beliefs, behavior and lifestyle that may impact sexual arousal in certain contexts.

*Personality traits and disorders.* A second set of explanatory models emphasizes interpersonal functioning, especially in terms of personality. These models are based in part on the idea that sexual aggression is an inadequate interpersonal behavior indicative of difficulties in establishing and maintaining healthy and mutually satisfying intimate relationships. From this perspective, the propensity for sexual aggression stems from the presence of insecure attachment styles in men committing acts of sexual aggression. This idea has its origins in the work of Marshall (1989) who hypothesized that sexual aggressors of women are characterized by an insecure attachment style, resulting from adverse early childhood experiences (e.g., separation, divorce, child abuse and neglect). The insecure attachment style is reflected in particular by low self-esteem, an inability to develop intimate relationships with others and, consequently, significant emotional loneliness. Therefore, in this context, sexual aggression can be conceived of as an inadequate way to fulfill intimacy needs. Similar to Marshall (1989), Hall and Hirschman (1991) also emphasized the role and importance of adversities and abuse experienced in childhood. However in their quadripartite model of sexual aggression, they focused more specifically on the subsequent consequences of these early experiences such as developing antisocial personality traits in adulthood. In this model, antisocial personality traits interact with physiological (deviant sexual arousal), emotional (anger, rage) and cognitive (cognitive distortions) contextual factors that increase the likelihood for sexual aggression.

The focus on antisocial personality in Hall and Hirschman's model can be contrasted with the narcissistic reactance model proposed by Baumeister et al. (2002). This model emphasizes the sexual assault of women in a rather specific context. Here, the key assumption is that an individual with narcissistic traits is more likely to interpret a refusal to his sexual advances as a
personal insult and in turn will have a strong negative reaction to such insult. This can be conceptualized as a narcissistic injury that increases the desire for sexual contact with this person. Under these circumstances the perpetrator's image as someone special, superior and unique is threatened, and as a result, so too is the personal safety of the potential victim. In this context however, sexual aggression is not necessarily a reaffirmation of the perpetrator's ‘self’, but rather is a reaffirmation of his sexual desires and needs. This model has been conceptualized in the context of sexual aggression in dating situations (Bushman, Bonacci, van Dijk & Baumeister, 2003), however generalizing it to other contexts, such as stranger rape, is difficult as recognized by Baumeister et al. (2002). In addition, personality profiles of sexual aggressors of women are quite diverse, and not strictly limited to narcissistic personality traits (Proulx et al., 1999; Proulx et al., 2014).

*Neuropsychological deficits.* While some explanatory models focus on personality disorders and intimacy issues, a parallel focus has been on neuropsychological functioning. For example, while psychologists have stressed the role and importance of self-regulation (e.g., Ward & Hudson, 2000) neuroscientists have stressed the role of executive functioning (e.g., Joyal, Black & Dassylva, 2007). Executive functions are actions in the brain that govern self-regulation (Barkley, 2001). Self-regulation refers to the psychological processes involved in goal setting as well as the planning, monitoring, assessment and modification of actions to accomplish a goal in an optimal manner. In a more recent integrated theoretical model, Ward & Beech (2006) stressed that the propensity for sexual aggression is associated with malfunction in this key neuropsychological system. This idea can be traced back to the work of Luria (1966) who described three jointly functioning systems in the brain. The first is the perception/memory system that is associated with the capacity for creating and storing information and/or activating existing representations of the environment. This system provides input to the arousal/motivation
system, which generates appropriate arousal and motivational states. Finally, the action selection system is responsible for the planning, controlling and execution of thoughts and behaviors, as well as the inhibitions of options that are inappropriate in order to deal with a certain environment.

According to Ward and Beech (2006) sexual aggressors of women may fail to recognize their emotional state or be confused when confronted with an emotionally charged situation (i.e., arousal/motivation system). As a result, they may have issues inhibiting their behavior, possess limited problem solving skills or limited abilities to adapt plans to deal with the situation (i.e., action selection system). In addition, they also may hold maladaptive beliefs and/or attitudes characterized by problematic interpretations of social encounters (i.e., perception/memory system). In the developmental psychology literature, problems of the arousal/motivation system tend to be those associated with internalization spectrum disorders (e.g., depression, anxiety and posttraumatic stress disorder); disorders of the action selection system with externalization spectrum disorders (e.g., attention-deficit/hyperactivity and conduct disorder); and, the perception/memory system with intellectual developmental disorder or general learning disability and developmental language disorders (e.g., Pennington, 2002). Self-regulation deficits are therefore not specific to sexual aggression and if sexual aggression is a symptom of neuropsychological malfunction, it can be assumed that these particular individuals may present additional and concurrent symptoms, such as involvement in externalizing, antisocial behaviors and/or internalizing behaviors (Lussier et al., 2007), which is also consistent, among other things, with insecure attachment issues (Marshall, 1989).

**Attitudinal and cognitive biases.** A fourth set of explanatory models of rape and sexual aggression against women involves assumptions surrounding attitudinal and cognitive biases and originated from socio-cultural and feminist theoretical work (e.g., Brownmiller, 1975; Sanday,
1981). From these perspectives, sexual aggression is not a reflection of behavioral inhibitory deficits (e.g., impulsivity), but rather, reflects false beliefs about gender relations, and incorrect interpretations of related social interactions and misdirected objectives. Burt (1980) highlighted the prevalence and role of stereotypes and myths about, primarily heterosexual, gender relations in the population. This includes false and prejudicial beliefs involving male entitlement in the context of sexual assault. Findings from this line of research (e.g., Burt, 1980; Malamuth, 1998) have demonstrated that adherence to such notions of male entitlement is particularly prevalent among individuals holding traditional patriarchal attitudes surrounding gender-specific societal roles, sexist attitudes, those who are suspicious of the opposite sex, and those who perceive violence as a legitimate means of resolving personal problems. According Polascheck and Gannon (2004), five main beliefs characterize such cognitive schemas (or implicit theories) of rapists: (a) women are dangerous, harmful and unpredictable; (b) women are sex objects; (c) (sexual) entitlement; (d) men's sexual drive is uncontrollable; and, (e) society is dangerous. This set of beliefs reflects the concept of hostile masculinity proposed by Malamuth (1998). In terms of sexual aggression, the concept of hostile masculinity emphasizes the central role of cognitive distortions supportive of sexual aggression, sexist attitudes and the perception that aggression and violence are legitimate strategies for pursuing sexual encounters with women. From the outset, this perspective aimed to bring to the forefront the role and importance of cultural factors, such as sexist attitudes, in promoting sexual aggression. However, beyond the broad cultural concept of patriarchy, the developmental origins of such attitudes and beliefs remain elusive.

Pseudo-Developmental and Developmental Models

The identified and hypothesized individual differences discussed above have also been presented into comprehensive etiological models of rape and sexual aggression. These comprehensive models show increasing consideration toward the understanding of the
development of the propensity for sexual aggression. Marshall and Barbaree (1990) proposed an etiological model of sexual aggression that, in effect, reflects a biosocial orientation. Presented as a general theory of sexual offending, the model was originally an explanation of sexual aggression against women (Marshall & Barbaree, 1984). This strict focus formed the basis for some critiques of the model (e.g., Ward, & Siegert, 2002) insofar as the focus on aggression tends to be more in line with sexual assault rather than sexual aggression more generally. Nonetheless, this early biosocial model was characterized by some basic assumptions about the origin and development of the propensity for sexual aggression against women. In effect, the propensity toward sexual aggression is determined by multiple potential biological and environmental factors. For example, these factors can: a) favor the disinhibition of behavior and internal constraints against sexual aggression; and, (b) interfere with the learning and development of these internal inhibitory mechanisms. From this approach, sexual aggressors of women have a developmental trajectory similar to individuals involved in nonsexual offenses. This particular model suggests that at birth, humans have two innate biological drives that are largely undifferentiated; sexuality and aggression. It is socialization processes beginning from infancy on that become central to distinguishing these two impulses, inhibiting aggression in a sexual context and vice versa. This hypothesis was supported, at least in part, by laboratory observations that sexual aggressors of women are not necessarily aroused by sexualized violence, but rather, are not inhibited by the presence of aggressive stimuli in a violent or sexual context. At the individual level, this inhibitory developmental task can be particularly difficult for young males whose testosterone levels are abnormally high, which is important both in terms of sexual behavior, as well as aggressive and violent behavior. In the context of socialization, it is also particularly challenging for children who have parents with poor parenting skills, and where the family context is characterized by abuse and violence.
In children where the successful acquisition of inhibitory tasks is compromised along either or both dimensions (i.e., individual and/or social) their prosocial interactions become increasingly limited as they make developmental transitions into early childhood and adolescence. For example, they may have increasingly limited prosocial interactions with their peers as a result of being socially rejected because they are aggressive, significantly affecting their self-esteem and favoring the development of increased hostility toward their social environment. In turn, aggressive and hostile youth become more susceptible to sociocultural messages promoting violence in general and negative attitudes toward women specifically. Over time, these messages become ingrained and develop into schemas about reality. Around puberty, these aggressive and distorted beliefs play an important role in masturbatory activities and facilitate the emergence of deviant sexual fantasies involving sexual aggression. Therefore, adolescents struggling with hostility, limited social skills, and deviant sexual fantasies, are at an increased risk of committing a sexually aggressive act in the presence of other significant disinhibitions, such as alcohol/drugs, intense negative affect, anonymity, stress and anxiety. Ward (2002) challenged a major premise to this model arguing that while some sexual aggressors have self-control problems, and that here sexual aggression reflects behavioral inhibition deficits, for others, sexual aggression reflects inadequate goal-oriented behaviors. This notion of inadequate goal-oriented behaviors supported by problematic attitudes, beliefs and values is central to the confluence model proposed by Neil Malamuth and colleagues.

The confluence model of sexual aggression put forth by Malamuth et al. (Malamuth, Sockloskie, Koss & Tanaka, 1991; Malamuth 1998; Malamuth, Addison & Koss, 2000; Malamuth, 2003) is an integration of various components of sociological and feminist theories on the one hand, and psychological explanations of sexual aggression on the other. The confluence model is an etiological model of violence against women aimed to more specifically explain the
propensity for sexual aggression according to the following key principles. The first is that the propensity for the use of coercive and violent behaviors against women is not specific to sexual aggression and is the result of interactions between biological, individual and cultural factors. Malamuth and colleagues have argued that the origin of this propensity is deeply rooted in family experiences and early childhood exposure to violence fostering the development of hostile cognitive schemas, sexism and an adversarial approach to gender relations. According to their model, children exposed to violence early in life are more likely to associate with delinquent peers that interfere with: a) the development of skills necessary to cope constructively with frustrations and interpersonal conflicts; and, b) the development of a prosocial identity and a long-term perspective. These deficits, in turn, manifest themselves in interpersonal relationships, including men's sexual behavior. In line with sociobiological explanations of rape as a by-product of sexual selection, the confluence model stipulates that these experiences favor the emergence of an impersonal sexual lifestyle where sexual behavior becomes a source of self-esteem in men by maximising the number of sexual partners.

Similar to the Marshall and Barbaree's (1990) model, the confluence model places a strong emphasis on the role and importance of the sociocultural environment. For example, a sociocultural environment that promotes power, strength, male bonding, dominance, aggression, and competition supports the development of hostile masculinity. Importantly, the concept of hostile masculinity can also be linked to the perception/memory system and the distorted beliefs and goals involved in self-regulation as proposed by Ward and Beech (2006). Furthermore, hostile masculinity also plays a disinhibitory role on men's behavior, including sexual behavior, in two ways. The first involves being less empathetic toward women. The second involves being less anxious about being rejected by women given adversarial cognitive schemas. Therefore, individuals characterized by hostile masculinity are likely to have an impersonal sexual lifestyle,
and are also more likely to resort to coercive and violent strategies in a sexual context, under particular circumstances. Sexual aggression, therefore, is not the result of a high sexual drive, but rather cognitive scheme characterized by hostility toward women among men with impersonal sexual lifestyles. This view of sexual aggressors as sexist, violent and hostile men was challenged by Knight and Sims-Knight (2003) who questioned some of these assumptions under the confluence model in light of the inability to replicate the model empirically in a sample of convicted sexual aggressors.

In their etiological model, Knight and Sims-Knight (2003) focused on the concept of psychopathy in the context of sexual aggression against women. More specifically, they emphasized the role and importance of psychopathic traits that emerge from exposure to violent family environments. On the one hand, these environments promote emotional detachment and lack of empathy. On the other hand, they also promote the development of antisocial and aggressive behavior. Developmentally, this model contrasts with that of Marshall and Barbaree (1984, 1990) which underlines the importance of low self-esteem, skills and a limited repertoire of social skills. Rather, the model of Knight and Sims-Knight (2003) presents a developmental profile that further magnifies the importance of conduct disorder and the relative lack of empathy for others, and this extends to the context of interpersonal relationships characterized by lies, manipulation and exploitation. In addition, hypersexuality is the second clinical dimension of the explanatory model, and refers to compulsive sexual behaviors and aggressive sexual fantasies. They argue that the origin of hypersexuality is primarily related to sexual victimization experiences during childhood. Therefore, this conceptualization of a propensity toward sexual aggression, although distinct from Malamuth's confluence model, depicts the role of psychopathic traits and hypersexuality, together favoring the emergence of sexually aggressive thoughts, fantasies and behaviors. The empirical study of Lussier et al. (2005b) however, calls
into question some of the underlying themes of Knight and Sims-Knight's model of sexual aggression. Indeed, the model of Knight and Sims-Knight (2003) suggests the presence of two distinct etiological processes; exposure to models of violence and the development of psychopathy; and, sexual victimization experiences that promote the development of hypersexuality. However, Lussier et al. (2005b) produced evidence to suggest that hypersexuality and sexual arousal to violent sexual fantasies emerge as a direct extension of an antisocial tendency for some men. In other words, individuals who exhibit antisocial traits are also characterized by antisocial sexuality that involves the search for immediate sexual gratification, poor frustration tolerance, and inadequate inhibitory mechanisms against their coercive sexual behavior that overall is limited to certain contexts.

Fourth Generation of Research and Theorizing: A Developmental Life Course Approach

At the turn of the millennium, the growing influence of comprehensive pseudo-developmental and developmental models on the scientific community, the introduction of longitudinal research and studies, coupled with the influential work of developmental criminology/psychopathology and the life course perspective, all lead to the gradual emergence of a fourth generation of research and theorizing in the area of sexual aggression. This generation of research, still in its infancy, primarily focuses on describing the development of rape and sexual aggression against women as well as identifying the risk and protective factors across different life and developmental stages (e.g., Abbey & McAuslan, 2004; Malamuth, Linz, Heavey, Barnes & Acker, 1995; Lussier & Blokland, 2014; Lussier, Corrado & McCuish, 2015b; Lussier, Blokland, Mathesius, Pardini, & Loeber, 2015a; Zimring et al., 2007, 2009).

The developmental life course perspective combines two broad research approaches that are not incompatible. The first, developmental research, is centered on the description and understanding of human development by focusing on successive and continuing person
environment interactions. The developmental perspective is particularly concerned about the role and influence of the environment (e.g., family, school, peers, workplace, and neighborhood) and its impact on a person's psychosocial development over life course. In criminology, the developmental perspective has been influential for promoting research allowing the identification of risk and protective factors of juvenile delinquency and adult criminality in the early years, prior the onset of these manifestations to inform prevention and intervention programs (e.g., Farrington, 2005; Loeber, Farrington, Stouthamer-Loeber & White, 2008; Moffitt, 1993). This approach has been questioned in the past for its overemphasis on the early years and the seemingly deterministic perspective. Life-course scholars (e.g., Sampson & Laub, 2003) have argued that life events, life transitions, and turning points in adulthood matter for everyone, irrespective of the formative years and early life experiences. The life course approach stresses that human development does not stop after childhood, but rather, continues to unfold well beyond throughout the entire life-course. Attitudes, values, and behaviors are shaped by life experiences and significant turning points (e.g., military service, employment, marriage, parenthood). The life-course perspective is not incompatible with the developmental research and theorizing (e.g., see Elder, 1998) and Farrington (2005) has since suggested that the developmental and life-course perspectives provide complementary theoretical frameworks for the study of crime and delinquency, including rape and sexual aggression.

A cornerstone of the developmental and life-course (DLC) perspective is the reliance on prospective longitudinal data to study the origins and the development of crime and delinquency. This approach, therefore, prioritizes research utilizing cohorts of individuals followed over time which involves repeated measurements over long periods, and, ideally, through different stages of human development (e.g., infancy, early childhood, etc.). Unlike studies based on incarcerated or clinical samples, sampling is not done after sexual offenses have occurred, but well before an
initial sexual offense. This not only allows for a more accurate identification and understanding of the precursors of rape and sexual aggression, but also contextualizes issues of continuity and discontinuity of the behavior. Therefore, these studies can identify different parameters of development in order to examine the dynamic aspect of sexual aggression over time (Blokland & Lussier, 2015; Lussier, 2015; Lussier & Cale, 2013). This involves parameters of interest such as: the age of onset of initial sexual aggression; the frequency of sexual aggression; continuity and persistence of sexually aggressive acts; escalation and progression of sexually aggressive behaviors, and finally, the termination of sexual aggression (Lussier, 2015). The usefulness of distinguishing these parameters is based on the rationale that different factors or mechanisms may explain specific aspects of the developmental course of sexual aggression. For example, it is unlikely that the factors responsible for the onset of sexual aggression are the same as those responsible for the termination of sexually aggressive behaviors. In addition, descriptive studies have clearly demonstrated some heterogeneity of sexual aggression among offenders, particularly in terms of the age of onset of the behavior, the number of times the behavior was manifested, the degree of crime specialization in sexual aggression, and the persistence of the behavior over time, (Cale & Lussier, 2012; Cale & Lussier, 2014; Cale, et al., 2009; Cale, Smallbone, Rayment-McHugh & Dowling, 2015; Lussier, Tzoumakis, Cale, & Amirault, 2010; Lussier, van den Berg, Bijleveld, & Hendricks, 2012). Nonetheless, contemporary theories of sexual aggression remain relatively silent regarding the diversity of these patterns. This is likely due, at least in part, to the fact that the empirical knowledge concerning the development course of sexual aggression remains relatively limited.

In recent years, the need and importance for a DLC perspective on sexual aggression has been raised by several scholars (Chaffin, Letourneau & Silovsky, 2002; Lussier, 2005; Smallbone, 2006), but there have been few attempts to formalize this perspective into a
theoretical framework (Lussier, 2015; Smallbone & Cale, 2015). As outlined above, most
etiological models of sexual aggression are focused on explaining between-individual differences
leading to sexual aggression. While the DLC approach is concerned with the role and importance
of between-individual factors such as intimacy deficits, personality disorders, and endorsement of
rape myths, it is also concerned with within-individual changes in these factors over time and
how those changes impact offending patterns and trajectories (Farrington, 2005). Some
theoretical models of sexual aggression are developmentally-informed (e.g., Marshall &
Barbaree, 1990), but remain vague as to the description, explanation and prediction of sexual
aggression over time. The longstanding and wide-spread propensity-oriented perspective in the
study of sexual aggression is an artefact of the type of research characterizing the field, which is
based on highly selective samples, retrospective data, and limited sources of systematic
information about the developmental background and history of convicted individuals. To date,
prospective longitudinal investigations along these lines have been used to study, almost
exclusively, recidivism (i.e., another arrest/conviction) among convicted offenders released from
prison, using mostly static and historical factors such as criminal history indicators (e.g., Hanson
& Bussière, 1998; Proulx et al., 1997). From a DLC perspective, the focus on sexual recidivism is
misleading for several reasons, but perhaps most critically the fact that it provides an extremely
limited snapshot of an individual's overall offending pattern (Lussier & Cale, 2013). While a
DLC perspective on sexual aggression remains in its infancy, the following sections offer an
examination of current etiological models of sexual aggression in light of some key DLC
concepts and principles.

A Static and Fixed Latent-Trait Propensity

The etiologic models of sexual aggression reviewed in this article mostly offer a static
view of the propensity for sexual aggression that appears to be relatively stable and fixed over
time. This static view of sexual aggression implies that individuals can be distinguished along a continuum of some latent-trait or a constellation of personal attributes (e.g., hypersexuality, hostile masculinity, and psychopathy) that influence the propensity to commit a sexual offense. This propensity has been described differently across etiological models, some focusing on general psychological functioning (e.g., neuropsychological deficits, personality characteristics, attitudes and cognitions), while others focus on sexual functioning (e.g., sexual urges, sexual interest and preferences). Within each of these two domains, etiological models are also distinct in terms of the key aspects emphasized by different authors to describe the propensity for sexual aggression. In sum, theories differ as to the nature, dimensions and properties of such propensity for sexual aggression against women. However, regardless of the focus, propensity theories remain unclear about the development of the latent trait conducive to rape and sexual aggression against women. The propensity approach suggests that the general population can be differentiated along a continuum, a high-order latent trait, or a constellation of traits associated with sexual aggression. That said, there remain unanswered key questions such as: a) what is the onset and developmental course of the latent-trait?; and, b) at what developmental stage do characteristics associated with the latent-trait become relatively fixed and stable, if at all? To our knowledge, there is little research examining the developmental properties of a latent-trait responsible for rape and sexual aggression. Furthermore, current theories offer minimal information as to the life-course patterns of such propensity and whether, for example, a latent-trait varies or fluctuates with age, life events, and across life transitions.

This raises further key questions about the contextual and age-graded factors that may influence the propensity for rape and sexual aggression. For example, in the field of risk assessment and risk prediction, research tends to refer to this constellation of traits as dynamic stable risk factors (e.g., Beech & Ward, 2004) suggesting that the propensity may vary over time.
To illustrate, using a key concept of Malamuth's confluence model, the developmental properties of hostile masculinity remain relatively unknown. Do individuals prone to hostile masculinity, and associated features such as the endorsement of rape myths and interpersonal violence, maintain these attitudes over the life course, across developmental stages, irrespective of life transitions and social environments? In the absence of empirical evidence, therefore, the stability of this latent trait remains hypothetical while portraying at-risk individuals to remain so for very long periods of time. These points raise another important question as to whether sexual aggressors of women are qualitatively different from one another. If so, this would suggest that a single theory of sexual aggression is insufficient to explain and account for the various longitudinal patterns of sexual aggression. A taxonomic model of sexual aggression, in that context, could be considered to describe and explain the multiple trajectories of sexual aggression (Cale, Lussier & Proulx, 2009; Lalumière et al., 2005; Lussier et al., 2012; Seto & Barbaree, 1997). This idea would suggest that there are multiple developmental pathways leading to rape and sexual aggression. From a developmental perspective, this represents the principle of equifinality; the notion that in any open system the end state can be reached by multiple means. In this context, different etiological mechanisms can cause the same developmental and behavioral consequences. Lalumière et al. (2005), for example, convincingly argued in favor of a three-trajectory model of rape and sexual aggression reflecting distinct developmental antisocial patterns: (a) a young male syndrome or adolescent-limited pattern; (b) a life-course persistent trajectory, and; (c) a psychopathy trajectory.

Alternative explanations to the propensity-based models are those framed around contextual, transitory, state-based factors of sexual aggression. Barbaree and Marshall (1991) described these state-based models that postulate certain transitory states have the potential for increasing the risk of sexual aggression in “normal men” (p. 622). Such a perspective does not
suggest that individuals having committed an act of sexual aggression present stable individual-differences from other men, but rather, that their sexually aggressive behavior was a specific response to the presence and convergence of contextual and situational cues. Thus far, research has been focused on the cognitive, emotional, behavioral, and physiological state of the perpetrator prior to or during the offense but much less so on the context inducing these states (e.g., Proulx, McKibben & Lusignan, 1994; Proulx et al., 2014; Ward & Hudson, 2000). There is empirical evidence that situational cues, inducing strong negative emotional states (e.g., rage, anger, humiliation), can either increase male's sexual arousal to rape cues in a laboratory setting or impede the efficacy of inhibition mechanisms. Research has also shown that alcohol consumption and intoxication can play an indirect effect on sexual aggression by facilitating sexual arousal to rape cues (e.g., Davis, Norris, George, Martell & Heiman, 2006) as well as impairing men's ability to focus on inhibitory cues and modify their behavior accordingly (e.g., Norris, Davis, George, Martell & Heiman, 2002). These processes, however, have been rarely examined and contextualized outside laboratory settings in real life situations.

In that regard, Schwartz, DeKeseredy, Tait and Alvi (2001) proposed and examined a routine activity model of sexual aggression on a college campus. The routine activity model is framed around the idea that amount and location of crime are affected by the presence of likely offenders, the absence of capable guardians and the availability of suitable targets. Schwartz et al. (2001) argued that criminogenic convergences conducive to sexual aggression are most likely to occur on college campuses because of the simultaneous presence of male students motivated to sexually assault women; the presence of available (i.e., vulnerable) female targets, and the relative absence of capable guardians willing to intervene. They contend, similar to Malamuth et al. (1991), that college campuses, and more specifically the presence of male peer groups endorsing patriarchal and sexist attitudes as well as violence against women, are prone to
inducing motivations for sexual aggression against women when there is an opportunity to do so. Furthermore, such peer groups are less likely to provide any sort of guardianship for women dating individuals endorsing negative views of women and violence, further increasing the risk of aggression. Schwartz et al. (2001) found that male college students with male friends supporting violence and who drink more heavily are more likely to be perpetrators of sexual aggression, and, that females who drink heavily are more vulnerable to sexual aggression than those who do not, as demonstrated by their higher sexual victimization rate. While these results do not provide empirical evidence against propensity models of sexual aggression, they reiterate the importance and need to better understand social contexts that are conducive to rape and sexual aggression. From a DLC perspective, a state-based approach raises questions about whether the same contextual factors are conducive to sexual aggression over life course. While past research has been focused mainly on young adults and college students, such research needs to be extended in order to reflect the presence and importance of changing and evolving social contexts and social roles throughout the life course (adolescence, emerging adulthood, adulthood, etc.) and across life transitions (e.g., entry in the workforce, cohabitation with an intimate partner, marriage, parenthood).

Onset and the Developmental Course of Sexual Aggression

Propensity models of sexual aggression depict sexual aggressors as life-course persistent sexual aggressors. From a static-propensity approach, the propensity to commit crime is generally understood as being relatively stable throughout a person's life and variations in individual offending rates are a function of fluctuating circumstances in criminal opportunities. Propensity theories also imply that individuals start and repeat offending for the same reasons, whether it is the presence of psychopathic traits, hypersexuality, or hostile masculinity etc. Fluctuating circumstances and criminal opportunities are rarely/vaguely described in etiological models of
sexual aggression of women making it difficult to infer criminal career patterns of sexual aggressors of women. There is no empirical evidence suggesting that with age and an increasing number of contacts with the criminal justice system, individuals having been charged and/or convicted for a sex offense become more apt at avoiding detection (e.g., Lussier, Bouchard & Beauregard, 2011). Therefore, it is somewhat difficult to reconcile the notion of a fixed and stable propensity for sexual aggression with the relatively low sexual recidivism rate observed and reported in longitudinal studies (Hanson & Bussière, 1998; Lussier, 2005), although sexual recidivism studies are overwhelmingly based on official police data which may underestimate “actual” recidivism rates. This is further compounded by the transient and opportunistic nature of sexual aggression reported across various criminal trajectories of these individuals (Lussier, et al., 2010; Lussier & Davies, 2011). Furthermore, even among persistent offenders, also referred to as serial or repeat sexual aggressors of women, research has shown much heterogeneity in their offending patterns (e.g., Miethe, Olson, & Mitchell, 2006). Indeed, there are serial sexual aggressors who sexually offend over long time periods in line with a propensity approach, but even then, their offending remains relatively intermittent, characterized by a succession of brief offending periods followed by long non-offending periods that theories of sexual aggression do not address (Deslauriers-Varin & Beauregard, 2014). In other words, even among persistent offenders, sexual aggression remains relatively inconsistent and intermittent.

One of the most consistent observations of men who commit acts of rape and sexual aggression is their involvement in antisocial, nonsexual criminal acts. Interestingly, this longstanding observation is vaguely addressed in most etiological models of sexual aggression, if at all, yet has been noted since the landmark study of Gebhard et al. (1965). As mentioned above, Hall & Hirschman's (1991) quadripartite model hints at the prevalence of antisocial personality disorder among this population, while Knight and Sims-Knight (2003) stress the role and
importance of psychopathic traits. Malamuth's confluence model (Malamuth et al., 1991) includes a juvenile delinquency construct that represents the role and influence of antisocial peers. Typological models of sexual aggression against women also recognize the presence of an “antisocial” or “impulsive” type among adolescent (e.g., Becker, 1998) and adult offenders (e.g., Gebhard et al., 1965). Such categorization, however, is too limiting considering the heterogeneity of antisocial development (e.g., Cale, et al., 2009; Ronis & Borduin, 2013; McCuish et al., 2015a) and the diversity of the general criminal careers of juvenile (Cale, et al., 2015; McCuish, Lussier & Corrado, 2015b) and adult offenders (Cale et al., 2009; Lussier, et al., 2010). Furthermore, the criminal history of individuals having committed an act of sexual aggression is composed mainly of nonsexual crimes (e.g., Simon, 2000) and mirrors that of nonsexual, violent offenders (e.g., DeLisi, 2001). When they do commit an act of sexual aggression, it is often in the context of a nonsexual offense that may or may not be sexually motivated to begin with (e.g., break and entry, burglary, theft, assault, etc.) (e.g., Pedneault, Harris & Knight, 2012). Sexual offenses represent a small proportion of the overall criminal activity and criminal career offenders, and when convicted sexual aggressors do reoffend, it is first and foremost for a nonsexual offense (Lussier, 2005). Importantly, this does not preclude the possibility that, over time, some individual's criminal activity becomes more patterned and specific to sexual offenses (e.g., Miethe et al., 2006) but such dynamic processes are not explained by existing theoretical models of sexual aggression. At a minimum, this calls into question the nature and dimension of such a propensity toward sexual aggression and whether sexual aggression is simply just another manifestation of an antisocial tendency (Lussier et al., 2005a). Most importantly, most etiological models of sexual aggression exclude or at best make minimal reference to criminogenic factors associated with offending patterns.
Existing propensity models of rape and sexual aggression provide minimal information about the observed patterns of offending among sexual aggressors of women. There is much variation and heterogeneity across sexual aggressors in terms of age of onset, frequency, continuity, persistence, and crime specialization (e.g., Francis, et al., 2014; Lussier & Cale, 2013). Most importantly, these etiological models of sexual aggression do not explain why some individuals initiate sexual aggression during adolescence, others in young adulthood, and yet others much later in life (e.g., Lussier & Cale, 2013; Lussier & Mathesius, 2012). In fact, it is unclear whether the models reviewed in this article explain adolescent-onset, adolescent-limited, adult-onset and/or adult-limited sexual aggression. There are some indications that these etiological models of sexual aggression against women are not necessarily restricted to the explanation of sexual aggression in adulthood. For example, some of the core concepts of Marshall and Barbaree's (1984) etiological model were later applied to the explanation of juvenile sexual aggression (e.g., Marshall, Hudson & Hodkinson, 1993). Similarly, key concepts of Malamuth's confluence model (Malamuth et al., 1991) first applied to explain nonsexual and sexual aggression committed by young adults were later applied to explain the sexual aggressions committed by adolescents (e.g., Hunter, Figueredo, Malamuth & Becker, 2003). Emerging findings from prospective longitudinal studies show that the childhood predictors of adolescence-onset sexual aggression do not similarly predict the adult-onset of sexual aggression (Lussier, Blokland, Mathesius, Pardini & Loeber, 2015a), something also demonstrated in studies using purposive samples based on retrospective data with youth and adult offenders (Knight, Ronis & Zakireh, 2009). The lack of certainty around whether or not the same explanatory factors apply to both sexual aggression committed by adolescents and adults may have also contributed, at least in part, to misconceptions surrounding the continuity of sexual aggression over life course.
Data stemming from the emerging DLC research on rape and sexual aggression suggest that there is both continuity and discontinuity of sexual aggression over time that is not accounted for in current etiological models of sexual aggression (e.g., Lussier & Blokland, 2014; Zimring et al., 2007, 2009). The continuity of sexual aggression refers to the persistence of sexual aggression across developmental stages, for example, the adolescence-adulthood transition. Psychopathological developmental models of antisocial behavior suggest that while most antisocial youth do not develop an antisocial personality, most adults with an antisocial personality disorder began their antisocial behavior either in childhood or adolescence (e.g., Moffitt, 1993). In the past, it has been suggested that adult sexual offending was typically preceded by juvenile-onset sexual offending (e.g., Abel & Rouleau, 1990). This hypothesis however is not supported by data stemming from prospective longitudinal birth cohort studies (Lussier & Blokland, 2014; Zimring et al., 2007; Zimring et al., 2009). The findings of prospective longitudinal studies based on official data of offending show that: (a) the vast majority of juvenile offenders are not involved in sexual aggression in adulthood (e.g., Lussier, 2015); and, (b) that most adult sexual aggressors have no prior history of juvenile sexual aggression (e.g., Lussier & Blokland, 2014). These findings raise some doubts about the notion of long-term persistence of sexual deviance among these individuals over life course. These emerging studies, however, are based on official police data on rape and sexual aggression, which underestimates the level of continuity over time. Limited work examining the continuity of rape and sexual aggression using prospective self-report data suggest that reliance of police data alone cannot explain the low continuity of rape and sexual aggression across the adolescence-adulthood period (e.g., Bremer, 1992). These results should be seen as preliminary given the scarcity of research using a multi-method approach, however, the general lack of continuity of sexual aggression across the adolescence adulthood transition highlights the need to explore the role and
importance of significant life events, turning points, and life transitions on the decision to reoffend or not, a line of research that currently remains in its infancy (van den Berg, Bijleveld & Hendriks, 2015). This is surprising considering that in descriptive clinical research studies there has been evidence that sexual aggression often preceded by negative life events, interpersonal conflicts, marital difficulties, and negative mood that contribute to a chain of events leading to an act of sexual aggression (e.g., Laws, 1989). While such research is plagued by retrospective biases, it does suggest the need to further contextualize the role of life events and turning points to better understand the developmental course of rape and sexual aggression over time.

Among policymakers and even some practitioners, there remains a common misperception that juvenile sexual aggression is a key risk factor for adult sex aggression and many current American policies and interventions are based on this misconception. Quite to the contrary, not only is there a lack of continuity of sexual aggression across the adolescence-adulthood transition, but in fact, the group most at-risk of committing sexual aggression in adulthood show a substantially different developmental background compared to adolescent aggressors. Evidence from prospective longitudinal data with birth cohort samples show that chronic general juvenile offending is a significant risk factor for adult sexual aggression over and above having a history of juvenile sexual aggression (Lussier & Blokland, 2014; Zimring et al., 2007; Zimring et al., 2009). This complex pattern of continuity and discontinuity is central to the developmental life-course perspective and highlights the limits of a static-propensity approach; current etiological models of sexual aggression do not specify the behavioral progression leading to sexual aggression. On the other hand, in the field of developmental psychopathology, Moffitt (1993) referred to the concept of heterotypic continuity to describe the unfolding of antisocial behavior over time, including sexual aggression. Elliott (1994) spoke of sexual aggression as the culmination point of the development of delinquency. Loeber and Hay (1994) presented a
stepping stone approach where sexual aggression is part of an escalating process along an overt antisocial pathway. Conversely, none of the etiological models of sexual aggression are explicit about the presence, nature or developmental course of behavior leading up to sexual aggression, yet the themes of physical aggression (Marshall & Barbaree, 1990), conduct disorder (Knight & Sims-Knight, 2003) and juvenile delinquency (Malamuth et al., 1991) are obvious.

Developmental Life Course Risk Factors

While contemporary etiological models of rape and sexual aggression may not be specific about the development and course of the behavior, they provide valuable insight about the developmental precursors or risk factors. Indeed, developmental risk factors such as sexual and physical child abuse experiences feature centrally in theories of sexual aggression. Nonetheless, etiological models of sexual aggression generally remain vague as to the early developmental processes involved prior to the onset of sexual aggression (e.g., Baumeister et al., 2002; Malamuth et al., 1991; Knight & Sims-Knight, 2003). There are some exceptions; Marshall and Barbaree (1984, 1990) provided perhaps the most compelling arguments for the role of early risk factors emphasizing the importance of attachment deficits related to sexual aggression. Nonetheless, most theories of sexual aggression do not address age-graded factors, and, as a result these models carry the implication that sexual aggression initiated in adolescence persists into adulthood. Early childhood trauma and social learning are perhaps the two most common etiological mechanisms correlated with the propensity toward sexual aggression against women (e.g., Knight & Sims-Knight, 2003; Malamuth et al., 1991; Marshall & Barbaree, 1990).

Hypotheses along these lines provide valuable starting points for a developmental model of rape and sexual aggression. However, at the same time, this pales in comparison to the leading etiological models of aggression and violence more generally. Aggression and violence represent important components of sexual aggression against women. Therefore, understanding of their
origin and developmental course is also critical to understanding the origin and developmental course of sexual aggression. Contemporary research has produced abundant evidence showing that the developmental course of aggression and violence is linked to a wide range of developmental factors operating at different stages in life, including genetic, pre/perinatal, biological, physiological, neuropsychological, school, peers, and neighborhood factors and the interaction of all of these (e.g., Farrington, 2007; Loeber, Farrington, Loeber-Stouthamer & White, 2008; Tremblay, Hartup & Archer, 2005). In order to advance a developmental life course model of rape and sexual aggression, it is necessary to expand the investigation of these factors accordingly.

While acknowledging the role and importance of early life stages and associated risk factors, researchers from the field of research on rape and sexual aggression have rarely ventured their research into the earliest stages of development, prior to the onset of sexual aggression. In a series of publications, Tremblay (2010, 2015) summarized some of the key findings from prospective longitudinal studies of antisocial behavior and aggression from its onset in infancy up to its later manifestations in adulthood. For Tremblay, trajectories of antisocial behavior and aggression are the result of successive person × environment interactions starting as early as the prenatal period. These findings can be articulated around the following six propositions. First, developmental trajectories of antisocial behavior from early childhood to adulthood are the consequence of genetic and environmental factors. Second, the early environment is created by the parents' own developmental history and influences their child's antisocial behavior through its impact of gene expression and brain development. Third, mothers have the greatest impact on early gene expression because of factors that operate prior to pregnancy such as their behavioral problems during adolescence, education and other structural adversities such as poverty, early pregnancy, mental health issues (e.g., depression), smoking and difficult relation with the father
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(see, Tzoumakis, Lussier & Corrado, 2012). Fourth, given the role and importance of the perinatal biopsychosocial environment on antisocial development, it becomes pivotal for successful prevention to ameliorate the early environment rather than chasing “bad genes”. Fifth, as children grow older, the larger environment comprised of school and peer factors have an impact on antisocial behavior partly through gene expression. Sixth, the genetic and environmental effects on antisocial behavior development will also impact several other functioning domains such as mood, school achievement, employment, substance use, etc. These propositions carry important features that the next generation of theoretical models of sexual aggression should incorporate in light of scientific evidence and development to better understand, at a minimum, the onset of rape and sexual aggression.

The intergenerational transmission of antisocial behavior and associated processes has important implications for the study of the developmental origins and course of rape and sexual aggression. These processes could be operating at the earliest developmental stages on sexual and interpersonal development. In the context of understanding the development and course of sexual aggression, a unique challenge for researchers will be to incorporate the role and importance of sexual behavior and its developmental course from onset in infancy. Current explanatory models of sexual aggression make little reference to sexual development prior puberty. It is generally argued that puberty is the critical period for young males given the surge of the testosterone level during that time period (Marshall & Barbaree, 1990) and negative peer influences that might lead vulnerable adolescents to pursuing impersonal sexual lifestyles (e.g., Malamuth et al., 1991). Research conducted with children, however, has shown that the onset of sexual behavior occurs much earlier in development (Friedrich et al., 1992), but not much is known about normative and nonnormative sexual development (Cale & Lussier, 2016; Lussier, McCuish, Mathiesius, Corrado & Nadeau, 2015c). In addition, research along these lines focused on the childhood period has
predominately been conducted with clinical samples of children having been sexually abused. As a result what constitutes normal, concerning, and atypical sexual behaviors, especially prior to adolescence remains somewhat unclear.

The lack of prospective longitudinal research with normative samples has precluded researchers from identifying and determining what the trajectories of sexual development are and what trajectories may lead to sexually intrusive and aggressive behaviors later in life. While it has been demonstrated in numerous studies that children showing ‘nonnormative’ sexual development have a history of child sexual abuse (e.g., Friedrich et al., 1992; Tarren-Sweeney, 2008), a substantial portion of these children do not present such a history (e.g., Silovsky & Niec, 2002). In fact, children showing evidence of nonnormative sexual development tend to present concomitant clinical features also reported in children presenting early and persistent antisocial behaviors, such as conduct problems and rule breaking behaviors, externalizing behaviors, attention problems, as well as physical aggression (e.g., Baker, Gries, Schnerderman, Parker, Archer & Friedrich, 2008; Friedrich, Grambsch, Broughton, Kuiper, & Beilke, 1991; Lussier & Healey, 2010; Meyer-Bahlburg, Dolezal & Sandberg, 2000; Tarren-Sweeney, 2008). Some researchers have argued that the comorbidity in the symptomatology of children presenting early sexual problems, especially with respect to additional behavioral and emotional regulation issues, suggests only modest specificity in the clinical profile of this population (Meyer-Bahlburg et al., 2000). This scientific literature and these findings have yet to be integrated into etiological models of sexual aggression, and thus the role of early sexual development on later sexual aggression remains somewhat unclear, an artefact of the paucity of prospective longitudinal studies on sexual development.
Conclusion

The first generation of theorizing and research focused on men's mental health and motivation to commit rape and sexual aggression and the possible origins of these motivations. The second generation of research was concerned by the prevalence of rape and sexual aggression in society and the perception and response to such acts. In the process, this generation of theorizing and research emphasized contextual and transitory states conducive to rape and sexual aggression. The third generation of research saw a shift toward the theorizing and explanation of persistence of rape and sexual aggression through the longitudinal study of sexual recidivism. The emergence and proliferation of longitudinal studies coupled with the influence of comprehensive theories of rape and aggression, a fourth generation has slowly emerged in recent years. This emerging generation of research has been concerned by the developmental, life course dynamics of rape and sexual aggression over time. More specifically, developmental life course researchers have been concerned by the onset, developmental course and termination of rape and sexual aggression and the associated developmental trajectories using prospective longitudinal data.

While we present a critical overview of studies of sexual aggression, the debates contained therein have been, and will continue to be central to innovation and scientific discovery to shed light on this phenomenon. Critical gaps in the literature that need to be filled to further progress scientific discovery in the field of research on rape and sexual aggression. Early clinical research stemming from first generation studies conducted with men convicted for rape/sexual aggression has pointed us in the direction of the search for specific factors related to a propensity toward sexual aggression and specialized theories of sexual aggression. On the other hand, second-generation studies factors have highlighted the role and importance of contextual and transitory factors as well as those non-specific to sexual aggression. Together, these overlaps and
gaps can be understood in the context of multiple and diverse pathways leading to sexual aggression. As a result, greater integration between first-generation and second-generation research and theorizing is needed in the context of examining the developmental life course patterns of rape and sexual aggression.

Importantly, risk factors for sexual aggression against women manifest beyond individual characteristics of perpetrators, and, at least to some extent, are governed by individual differences, developmental factors, life course context, and opportunity and circumstances. This is why the prevalence and incidence of sexual aggression varies over time and place. The locus of cause associated with sexual aggression has rarely been pursued within a single research program, but rather a series of independent ones. While the development of a propensity toward sexual aggression has been conceptualized in different ways, regardless of the theoretical approach, the stability of this propensity over the course of development is unclear, and so too are the factors related to the development and course of such a specific propensity. While patterns of rape and sexual aggression over the life-course are becoming more clear in the advent of prospective longitudinal studies on their description, and will continue to be elucidated by prospective longitudinal research starting earlier in childhood and extending later in life, across various life transitions and contexts, the next step is the identification of the factors associated with the different courses.

There is robust research along these lines examining aggression and violence more generally that has not been echoed in parallel research on sexual aggression. There is the need for research examining prospectively the risk and protective factors prior to the onset of rape and sexual aggression, to consider intergenerational patterns in risk and sexual aggression, gene × environment interactions, and to include the influence of life transitions and events not only on the development of sexual aggression, but also on its termination. The investigation of the early
developmental stages is unlikely to provide all answers to the developmental course of sexual aggression over time. The issue of the late-onset of sexual aggression as well as the continuity and discontinuity of sexual aggression over life course should also be at the forefront of researchers' agendas. Research has shown that desistance from sexual aggression is the norm among individuals having committed an act of sexual aggression (e.g., Francis et al., 2014; Lussier & Healey, 2009; Wollert et al., 2010) and those men considered to be high-risk may not remain “high-risk forever” (e.g., Hanson, Harris, Helmus & Thornton, 2014). Propensity models do not provide information about the termination of sexual aggression or the process leading to it resulting in the implicit conclusion that men characterized by a propensity for rape and sexual aggression at some point in their lives will act accordingly throughout the life course. The scientific literature on persistence and desistance provides valuable information to explore in the context of rape and sexual aggression (e.g., Loeber et al., 2008; Maruna, 2001). Emerging research with individuals having committed sexual aggression against women indicates that some of the key turning points associated with desistance from general offending may carry little protective value against the continuation of long-term deficits associated with sexual aggression (Harris, 2014).

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