

Running Head: SEXUAL FANTASIES OF SEX OFFENDERS

Understanding the Sexual Fantasies of Sex Offenders and their Correlates

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ABSTRACT

Sexual fantasy is proposed to be an important factor in sexual offending. However, the existing research on this topic suggests that its role is multifaceted and interrelated with various other important factors associated with the sex offender. Thus, in this paper, we begin by examining some of the conceptual and definitional issues regarding the term ‘deviant sexual fantasy’. We then discuss the literature relating to sexual fantasies and some of its chief correlates, including: (1) sexual arousal, (2) affective states, (3) personality, and (4) behavior. Throughout the paper we discuss the relevant research and theories; identify the possible areas for future research; and offer some novel suggestions for theoretical development.

Keywords: Sexual fantasy; Sex offending; Deviant fantasy; Sexual arousal; Affect

Introduction

Researchers and theorists have been emphasizing the role of deviant sexual fantasy in the etiology of sexual offending ever since Abel and Blanchard (1974) stressed its importance in their seminal paper on the treatment of sexual deviation. This role has been and is still predominantly related to the acquisition and maintenance of deviant sexual interests via various conditioning and social learning processes (McGuire, Carlisle, & Young, 1965; Laws & Marshall, 1990). Considering that deviant sexual interests are a key risk factor in sexual offending (Thornton, 2002) and that meta-analytic studies have shown them to be the biggest single predictor of sexual recidivism (Hanson & Bussière, 1998; Hanson & Morgan-Bourgon, 2005), the assumption that sexual fantasies are an important factor in understanding sexual offending appears more than plausible.

However, it has been argued that deviant sexual fantasies have a more direct influence on sexual offending. For example, many researchers propose that the recurrent use of deviant sexual fantasies can lead to the commission of a sexual offence in some offenders, whereby the individual becomes motivated to enact the imagery they have mentally simulated within their fantasies (see MacCulloch, Snowden, Wood, & Mills, 1983; Deu & Edelman, 1997; Ward & Hudson, 2000; Wilson & Jones, 2008). This argument is supported by Maniglio's (2010) recent systematic review involving seven studies and a combined total of 171 sexual murderers, where it was found that deviant sexual fantasies promote sexual murder when combined with early traumatic experiences. Alternatively, others assert that deviant fantasies act as 'disinhibitors' that desensitize an individual to deviant behavior, which lowers their internal inhibitions against engaging in such behavior and, therefore, increases the likelihood of offending (Gee, Devilly, & Ward, 2004).

Indeed, based on official records and interview data, Proulx, Perreault, and Ouimet (1999) found that for extrafamilial child molesters, deviant fantasies were one of the most frequently reported immediate (12-hr) disinhibitors.

Deviant sexual fantasy is, therefore, a factor worthy of both clinical and academic attention. However, as Hudson, Wales, Bakker, & Ward (2002) note, it is unlikely that deviant sexual fantasy alone will predict future offending in isolation from other factors related to the offender. Indeed, research has shown that sexual fantasies are interrelated with other key factors such as emotion and sexual arousal. For example, Gee, Ward, and Eccleston (2003) qualitatively analyzed the interview transcripts of 24 sex offenders and found that sexual fantasies can be used to: (a) regulate affect; (b) enhance/induce sexual arousal; (c) cope; and (d) re-live an offence or simulate a future offence. Researchers also assert that sexual fantasy use is dependent upon the disposition and motivation of the sex offender (e.g., Langton & Marshall, 2001; Ward & Hudson, 1998). For example, Langton and Marshall explain that sexual sadistic rapists use deviant sexual fantasies for sexual pleasure, whereas sexual nonsadistic rapists use deviant fantasies as a way of compensating for their low masculine self-image and sexual inadequacy. Thus, given that deviant fantasies interrelate significantly with other factors associated with the sex offender, it appears as though their role is not as straightforward as first thought. Thus, the current paper aims to describe and synthesize research and relevant theory related to deviant sexual fantasy and its various correlates. We begin with a detailed discussion on the definition of deviant sexual fantasy before moving on to discuss some of the main factors associated with sex offenders' fantasies. These include deviant sexual interest/arousal, affective states, personality, and behavior. We end with an overall summary and considerations for future research.

Defining deviant sexual fantasy

Various terms have been used to refer to the sexual fantasies of sex offenders, such as *coercive fantasies* (Drieschner & Lange, 1999), *paraphilic fantasies* (O'Donohue, Letourneau, & Dowling, 1997), and *lapses* (Pithers, Kashima, Cumming, Beal, & Buell, 1988). However, the most widely used term is *deviant sexual fantasy*. This is perhaps understandable when referring to sex offenders in general since the other terms tend to be more specific. For example, the term 'coercive fantasy' is used mainly in articles about rape, whereas 'paraphilic fantasy' can refer to any one of the paraphilias as defined by the DSM-IV (American Psychiatric Association, 2000), many of which are not sexual offences (e.g., transvestism).

Although the term 'deviant sexual fantasy' is evidently preferred within the literature, there appears to be no formal definition of the term. Instead, authors tend to provide definitions for sexual fantasy more generally, which typically embody the relationship between fantasy content and arousal. To illustrate, Rokach (1990) defines sexual fantasy as any daydreaming that includes erotica and that is sexually arousing, and Leitenberg and Henning (1995) similarly regard sexual fantasy as being almost any imagery that is sexually arousing or erotic to the individual. Such definitions remain necessarily broad because the process of defining sexually arousing imagery and, therefore, a sexual fantasy, is highly subjective, requiring the acknowledgement of specific behaviors (Swaffer et al. 2000). However, it can be argued that this process is less subjective in relation to deviant sexual fantasies as the imagery contains a more specific set of behaviors (i.e., those that are deviant).

A major problem, however, is that questionnaire and self-report studies show that nonoffending individuals also entertain deviant sexual fantasies, which raises

questions as to what can be classed as a 'deviant' fantasy. For example, Williams, Cooper, Howell, Yuille, and Paulhus (2009) found that, in a sample of 103 undergraduate males, 95% reported having experienced at least one sexually deviant fantasy during their lifetime. More specifically, many non-offending males self-report fantasies involving dominance, force, and coercion (e.g., Bartels & Gannon, 2009; Crépault & Couture, 1980; Gold & Clegg, 1990; Greendlinger & Byrne, 1987; Zurbriggen & Yost, 2004), and sadism (Gray, Watt, Hassan, & MacCulloch, 2003). For instance, although a time period was not provided (e.g., over a lifetime, 12 months), Crépault and Couture report that 33% of their non-offending sample admitted to masturbating to fantasies of raping a woman. They also found that 61% fantasized about sexually initiating a young girl (although it was not stated whether this referred to an underage girl). Other research has demonstrated that some non-offenders fantasize about children (Becker-Blease, Friend, & Freyd, 2006; Briere & Runtz, 1989; Smiljanich & Briere, 1996). For instance, Becker-Blease et al. found that, in a sample of 531 undergraduate males, 18% reported fantasizing about child sexual abuse within the last 12 months. In all, this body of research suggests that deviant sexual imagery is "within the normal realm of human experience" (Gee & Belofastov, 2004: p.51), raising questions about what exactly constitutes a deviant fantasy.

Gee et al. (2004) coined the term "offence-focused fantasy" as a means of distinguishing between the offence-based fantasies reported by sex offenders and those reported within non-offending populations, in order to reduce the problems associated with the term 'deviant fantasy' (Gee & Belofastov, 2004). Gee et al. state that offence-focused fantasies contain "sexually deviant material that, if acted out, would legally constitute a sexual offence"

(Gee et al., 2004: p.323). It is unclear, however, as to how the offence-focused content differs from the deviant imagery reported by non-offending individuals, since fantasies about raping a woman or having sex with a child, as reported by some non-offending males (e.g., Crépault & Couture; Becker-Blease et al.), would also clearly constitute a sexual offence if acted out.

The Oxford Dictionary defines *deviant* as a "(Thing or person) that deviates from normal behavior". Thus, research showing that deviant fantasies are reported by non-offending populations renders the term 'deviant' a misnomer in relation to sexual fantasies. This point was also realized by Leitenberg and Henning (1995), who asserted in their review that the term deviant sexual fantasy is misleading if it is not directly linked to deviant sexual behavior. Perhaps a more accurate term would be "fantasies containing deviant behaviour". As a consequence, Leitenberg and Henning suggest that attention should be given to individuals whose barriers between fantasy and behaviour are broken. Also, since research has shown that 95% of non-offenders report using at least one deviant fantasy during their life (Williams et al., 2009), particular attention should be paid to those individuals who have a preoccupation or overreliance on deviant sexual fantasies (Stein, 2007).

Another problematic area involved in defining sexual fantasy that has not received much attention, especially within the forensic domain, concerns the actual conceptualization of the term *fantasy*. Psychoanalytic writers have often characterized fantasy as being a mental image that contains a group of symbols unified into a script or story (Beres, 1960; Rokach, 1990), whereas Prentky et al. (1989), drawing upon information-processing theory, define fantasy as being an "elaborated set of cognitions (or thoughts) characterized by preoccupation (or rehearsal), anchored in emotion, and originating in daydreams" (p.889). Regardless of their theoretical

differences, both definitions share two facets. The first is the assumption that fantasies occur internally or within the mind, evident from the use of the terms 'mental image' and 'cognition'. The second feature refers to the nature of a fantasy, in that, they are 'script' or 'story'-like and 'elaborate'. This second feature appears to distinguish fantasies from static mental images or fleeting thoughts. However, some researchers assert that *sexual* fantasies can be both an elaborated story *or* a fleeting sexual thought (Hicks & Leitenberg, 2001; Wilson, 1978), thereby positioning sexual fantasy as an umbrella term for any sexually-related cognition (Renaud & Byers, 2001). This all-encompassing conceptualization appears to have taken precedence, as reflected in the various definitions. Ironically, these definitions appear to provide the answer as to why both fleeting and elaborate sexual cognitions are regarded as being fantasies; namely, they both focus on sexual arousal (Wilson & Jones, 2008). However, even though it may be the case that both sexual fantasies and sexual thoughts can be sexually arousing, it does not necessarily follow that they are the same thing. For example, they may be associated with different neuropsychological substrates and elicit different psychological and physiological reactions.

Another line of argument is that differences in sexual cognition are not of kind but of degree. Based on a recent interview study, Gee, Ward, Belofastov, and Beech (2006) claim that the duration of sex offenders' fantasies varies along a continuum, ranging from fleeting to prolonged, and is dependent upon an offender's active or passive attempts to regulate them. Although this is an intriguing possibility, it would have been beneficial to have known whether both the fleeting and prolonged fantasies were script-like in nature. This would have supported the idea that the supposed fleeting *sexual fantasies* were indeed fantasies and not fleeting *sexual thoughts*. Nevertheless, it is clear that this is an area in need of further investigation and is certainly an area

worth investigating with regards to sex offenders, as a distinction between deviant sexual fantasies and sexual thoughts will have important implications in terms of theoretical understanding and the application of appropriate treatment strategies. For example, it is hypothesized that the repeated use of deviant sexual fantasies can lead to the passive planning of an offence, as it creates an implicit offence script or ‘blueprint’ (Pithers et al., 1988; Ward & Hudson, 2000). This seems logical if an offender’s fantasy involves an elaborate sexual script, but less likely if they only experience brief lustful thoughts. Thus, rather than categorizing all sexual cognition as being a sexual fantasy, researchers should approach sexual thoughts and fantasies separately, establishing whether they have discrete effects and properties, as well as whether they interrelate (i.e., a lustful thought may trigger the use of a related sexual fantasy).

Given the definitional issues surrounding the term deviant sexual fantasy, and in light of recent research and theory, we propose an alternative term and distinct conceptual definition¹. Specifically, a ‘*high-risk sexual fantasy*’ is any mental imagery involving an elaborate sexual scenario or script with distorted aims and/or means, whose repeated use can increase the risk of the fantasizer committing a sexual offence in the presence of certain contexts and/or dispositions. Note, this is not an operational definition designed to measure or quantitatively express the phenomenon. It is purely a conceptual (or theoretical) definition that attempts to resolve some of the issues described earlier. Firstly, by stating that sexual fantasies involve “any mental imagery”, the definition encompasses sexual imagery that is based on both memory and imagination. Secondly, emphasizing their script-like nature isolates sexual fantasies from fleeting sexual thoughts, thus, allowing for a clear distinction. Thirdly,

¹ Note that, in keeping with the majority of the literature, we will continue to use the term *deviant sexual fantasy* throughout the paper.

by stating that their content includes sexual behavior with distorted aims and/or means (taken from Craissati and Beech, 2003), a range of sexual themes relating to the risk of sexual offending can be included (i.e., force, rape, molestation, murder, exhibitionism) without the use of the contentious term 'deviant'. Further, the use of 'distorted aims/means' is preferred over terms such as 'offence-related' or 'offence-specific' because some fantasy themes do not necessarily constitute a sexual offence if acted out (e.g. sadistic fantasies acted out with a consenting partner). Thus, the focus here is on increasing risk. Fourth, since many of the general population report experiencing at least one high-risk sexual fantasy (William et al., 2009), we have explicitly stated that it is the repeated use or preoccupation with such fantasies that increases risk, not just the content (Stein, 2007).

This leads on to the final point which is that the definition refers to both sex offenders and the general population. Sex offenders are hypothesized to increase their risk of reoffending by repeatedly using offence-related sexual fantasies. Similarly, men in the community who use deviant sexual fantasies also increase their likelihood of committing a sexual offence (Greendlinger & Byrne, 1987). As the definition states, such risks are increased within certain contexts. For instance, an offender or individual from the general population who harbors fantasies about forcing a woman to have sex but who has no desire to act on them may end up doing so in the context of being intoxicated, stressed or experiencing negative affect (Gee et al., 2003, Ward & Hudson, 2000). These particular contexts have been described by Relapse Prevention (RP) models as 'high-risk situations' (Pithers, Marques, Gibat, & Marlett, 1983). Lastly, the definition also refers to dispositional factors, which includes offence-supportive beliefs (or 'implicit theories'; Ward, 2000), and/or specific personality characteristics that influences the enactment of a fantasy (Grubin, 1999;

Williams et al., 2009). For example, an individual may end up acting out a high-risk sexual fantasy if he possesses the distorted belief that women will eventually enjoy forced sex. Similarly, a psychopathic individual may be more likely to act out his high-risk fantasy as he experiences a lack of remorse for his actions.

The inclusion of contextual events and dispositional traits in this definition incorporates the overall focus of this paper; that sexual fantasies interact by other factors associated with the fantasizer. Although this has not been emphasized in any definition of sexual fantasy before, it has been recently recognized and discussed by Beech and Ward (2004). They proposed an etiological model of risk that included a section labeled ‘_triggering or contextual events’, which they likened to *acute dynamic risk factors*, defined as rapidly changing or contextual factors that typically occur around the time of offending (Hanson & Harris, 2000). Within this section of their model, Beech and Ward include deviant sexual fantasies, asserting that they develop from the core set of schemas (disposition) held by an offender in interaction with specific triggers, such as negative affect or substance abuse (context). Again, the focus here is not on the cause of an offence but on *increasing the risk* of an offence. Thus, this new term and definition embodies Beech and Ward’s theoretical account of risk, and reflects the notion that deviant fantasizing sets in motion a series of decisions that progressively increases the risk of offending.

Sexual fantasy, arousal, and interests

It is a widely held assumption that sexual fantasy shares a close connection with sexual arousal and interests. As discussed in the previous section, this connection is the defining feature of existing sexual fantasy definitions (Leitenberg & Henning, 1995; Rokach, 1990). It is also a core component of conditioning theories that explain

the acquisition of deviant sexual interests (e.g., McGuire et al., 1965; Laws & Marshall, 1990), and forms the basis of most treatment strategies designed to modify deviant sexual fantasy, arousal, and interests. For example, research and case studies on arousal modification have demonstrated that pairing deviant sexual fantasies with an aversive stimulus or providing no reward for masturbating to a deviant fantasy (e.g., satiation) can reduce sexual arousal levels as well as reduce the frequency of deviant fantasies (see Laws & Marshall, 1991 for a discussion on some of the main arousal modification techniques). Thus, sexual fantasy has an important relationship with sexual arousal and interests, which we will now examine more closely.

Sexual arousal is commonly considered to be a purely physiological response defined by increased autonomic activation that prepares the body for sexual activity, and can be contrasted with sexual desire; a psychological construct involving the "wanting" and "craving" of a sexual activity (Toledano & Pfaus, 2006). It is suggested that sexual arousal levels are affected by whether an erotic stimulus is sexually desired, which has led to the assumption that sexual arousal is an indicator of sexual desire (Rempel & Serafini, 1995). For example, someone who is sexually aroused by rape-related stimuli could be assumed to have a sexual desire about rape (see Abel et al., 1977; Barbaree et al., 1989). This demonstrates the rationale behind identifying deviant arousal in an attempt to establish a deviant sexual interest.

Additionally, an offender's level of sexual arousal to a deviant desire can be further affected by whether or not they engage in compatible sexual behaviors, which includes sexual fantasies (Kalmus & Beech, 2005). This idea has received some empirical support from studies using phallometrically assessed sexual arousal. For instance, Smith and Over (1987a; 1987b) found that men who engage in fantasy themes that have a high erotic value and who are able to form vivid imagery show the

highest levels of sexual arousal, as indicated by greater penile tumescence. Palk and O'Gorman (2004) found that when their sample of sex offenders listened to a repeated sexual fantasy that matched their deviant sexual interests, over a series of trials, their levels of sexual arousal increased. Support has also been gained from Gee et al.'s (2003) qualitative study showing that sex offenders use sexual fantasies as a way of inducing a state of sexual arousal, and/or enhancing a pre-existing, low-level state of sexual arousal. They note that fantasies used to induce arousal typically occur prior to sexual activity (i.e., masturbation, consensual sex, or sexual offence), whereas fantasies used to heighten sexual arousal are associated with moving the offender nearer to orgasm.

In order to ensure that sexual arousal is achieved, sexual fantasies are often adapted (MacCulloch et al., 1983; Toledano & Pfaus, 2006). Support for this comes from research investigating sexual dysfunction. In an experiment measuring penile tumescence, Weisberg, Sbrocco, and Barlow (1994) split a sample of sexually functional participants into two groups. One group was asked to write down and engage in a sexual fantasy involving problems achieving or maintaining an erection, while the other was told to create a sexual fantasy where they performed satisfactorily. Counter to their hypotheses, there were no significant differences in sexual arousal between the two groups. However, although participants in the 'sexual dysfunction' group produced fantasies that included erectile and performance problems as requested, they did not focus on these aspects. Thus, the fantasies had been cognitively adapted to allow sexual arousal to still be achieved.

In relation to sex offending, Laws and Marshall (1990) propose that conventional sexual fantasies go through minor adaptations over time in order to maintain their erotic value; a process that can lead to deviant content. For example, an

individual may fantasize about younger and younger females until eventually they are inappropriately young. Thus, the capability of fantasies to alter in order to maintain sexual arousal is assumed to be a key process behind the development of deviancy. It has been proposed that the reason why sexual fantasies go through progressively deviant variations in the first place is due to the process of 'habituation' (MacCulloch et al.; Meloy, 2000). Habituation is a non-associative learning process involving the reduction in strength of a response to a stimulus after repeated exposure. In this case, the level of sexual arousal elicited by a sexual fantasy is believed to reduce if the same fantasy is repeatedly used. Curiously, however, although there is some evidence for habituation in non-offending males (Koukounas & Over, 1993), it has not been demonstrated in sex offenders. For example, Palk and O'Gorman (2004) found that their sample of eight sex offenders failed to display habituation in sexual arousal responses to a personally customized sexual fantasy played to them via audiotape. This suggests that perhaps sex offenders do not habituate to their sexual fantasies, which the authors postulate may be because sex offenders cognitively process erotic stimuli differently to non-offenders. This is an area that should be investigated further.

The idea of cognitive processes playing a role in the interaction between fantasy and arousal may be a fundamental piece of the puzzle to understanding this relationship. Thus, will we now discuss two interesting theoretical avenues recently proposed that may help advance our understanding. The first comes from the idea that, in addition to physiological responses, there are cognitive and affective components associated with sexual arousal (Janssen et al., 2000). The cognitive component involves the appraisal of a stimulus as 'sexual'. This process essentially works by comparing a stimulus against explicit (conscious) and/or implicit (unconscious) sexually-related memories (Geer et al., 1993). Explicit sexual

memories include previous sexual experiences, attitudes towards sex, and sexual fantasies, whereas implicit memories of sexual information include automatized scripts, classically conditioned sensations, and innate sexual reflexes (Spiering et al., 2004). If explicit sexual memories confirm a stimulus as being sexual, it results in the subjective experience of sexual arousal. If the stimulus matches implicit sexual memories, physiological arousal ensues. Thus, an awareness of both the genital response (“I feel sexually aroused by this stimulus”) and one’s conscious mode of thinking (“This stimulus is sexually arousing”) constitutes a complete ‘feeling’ of sexual arousal (Spiering et al., 2004). Explicit sexual information can be assessed using questionnaires and interviews, but implicit sexual information requires the use of more innovative techniques. For example, Janssen et al. (2000) found that sexual stimuli presented below the level of conscious awareness (i.e., subliminally) resulted in genital arousal, suggesting the activation of implicit sexual memories.

From this description therefore, sexual fantasies appear to be are involved in the cognitive appraisal process in two ways. Firstly, as the theory explains, they are a type of explicit memory that sexual stimuli are matched against. Secondly, their extensive use can lead to the development of automatized scripts held in the implicit memory (Ward, Polaschek, & Beech, 2006). This demonstrates how deviant sexual fantasies can work on a cognitive level to maintain deviant sexual arousal/interest.

The affective component of sexual arousal is involved in the regulation of attention towards a stimulus once it has been cognitively identified as sexual. Put differently, emotional salience is used to determine whether a sexual stimulus receives sustained attention, which in turn will increase sexual arousal. If a sexual stimulus matches positive explicit and/or implicit information in memory then it is likely to receive additional attention, whereas if it matches negative sexual memories then

attention is discontinued or avoided (Spiering et al., 2004). Since sexual fantasies are regarded as internally generated stimuli that produce results similar to external stimuli (Gress & Laws, 2009), it can be argued that they too are appraised for their emotional meaning. Findings from recent studies provide support for this idea (Gee et al., 2006; Renaud & Byers, 2005). For example, Renaud and Byers found that in a sample of 144 college males, sexual fantasies about dominance were more often experienced as negative, rather than positive. However, some males did appraise such fantasies as positive and it was found that the frequency of positively appraised fantasies was predicted by the use of sexually coercive behavior. This either suggests that the positive appraisal of deviant sexual fantasies influences deviant behavior, or that deviant behaviour increases the likelihood of appraising a deviant fantasy as positive. Either way, it supports the idea that sexual fantasy is itself a stimulus that is affectively appraised. With regards to sex offenders, Gee et al. (2006) have found that sexual arousal elicited from a sexual fantasy can be moderated by how the fantasy content is appraised. Thus, if an offender appraises a sexual fantasy negatively, they may be able to reduce the level of sexual arousal they experience (Spiering et al., 2004).

An interesting consideration stemming from this information processing approach is the concept of cognitive dissonance; the uncomfortable feeling when one is faced with two contradictory ideas at the same time (Festinger, 1957). To elaborate, if an individual experiences sexual arousal (subjective and/or genital) towards a deviant sexual fantasy but appraises it negatively, this may create a feeling of cognitive dissonance. As the theory states, attempts are made to reduce this feeling, which in this case may involve developing distorted sexual attitudes that change how the fantasy is appraised in the future. These ideas are worth researching further. For

example, Toledano and Pfaus (2006) have devised the 'Sexual Arousal and Desire Inventory' (SADI) - a self-report measure of subjective sexual arousal - which would be interesting to use with offenders to see if they show discrepancies in their subjective arousal and appraisal towards a deviant fantasy.

Another theoretical avenue is based on the idea that the level of sexual arousal elicited by a fantasy may be increased by the use of certain external practices. This idea is drawn from Ward and Casey's (2010) 'extended mind theory' (EMT) of sex offenders' cognitive distortions. EMT essentially states that external factors can be viewed as part of our extended cognitive system (Clark, 2008). According to EMT, humans engage in cognitive practices (goal-directed activities) in order to address and attain specific goals. These cognitive practices typically require the integration of internal cognitive factors (i.e., beliefs and attitudes) with external cognitive elements (i.e., the use of pornographic stimuli). Thus, it could be argued that sexual fantasies are cognitive practices used by offenders as a means of inducing sexual arousal (goal), that require the use of both internal elements (e.g., distorted beliefs) and external elements (e.g., deviant pornography) to be fully effective. Pornography can be considered an external element that is part of the cognitive process involved in producing sexually arousing fantasies as it is functionally coupled with the internal mental states that elicit sexual arousal. In other words, the distorted sexual beliefs and interests of the offender can be regarded as encoded in the content of deviant pornography.

Research suggests that each element alone is sufficient in producing sexually arousing fantasies but both elements together may form a more efficient *functional relationship* that can produce fantasies that are even more arousing. The results of a study by Malamuth (1981) provide indirect support for this contention. He found that

men with a sexual orientation towards forced sex (internal component) created sexual fantasies (cognitive practice) that were more arousing (goal) after being exposed to rape-related stimuli (external component), in contrast to mutually-consenting stimuli. Thus, for these force-oriented men, the rape-stimuli can be construed as an example of their extended cognitive system, as it most likely matched their internal cognitive component (i.e., sexual attitudes/interests). An important consideration of this extended mind account of sexual fantasy is that it may enhance the efficacy of treatment. In line with Ward and Casey (2010) advice, practitioners treating deviant fantasies should attempt to detect both the internal *and* external elements of an offender's cognitive system.

To sum, deviant sexual fantasy has a close associative link with sexual arousal and interests, but the nature of this relationship may extend beyond just being a conditioned stimulus that elicits a conditioned sexual arousal response. For instance, there is a need to investigate the cognitive processes underlying sexual fantasies and arousal. The two theories discussed both provide potential insight into this aspect. However, they are both recent theories, particularly Ward and Casey's, and have not been empirically tested with regards to sexual fantasies. Therefore, it is essential that further research is conducted in this area, perhaps using these theories as the theoretical underpinning.

Sexual fantasy and emotion/affective states

It is becoming more widely recognized that emotions and affective states are an important factor in sexual offending (Cortoni & Marshall, 2011; Day, 2009; Howell, Day, & Wright, 2004; Gery, Miljkovitch, Berthoz, & Soussignan, 2009), and research findings have suggested that sexual fantasy may play an important role in this

relationship (DiGiorgio-Miller, 2007; Gee et al., 2003; Looman, 1995, 1997; Mann, 2004; McKibben, Proulx, & Lusignan, 1994; Pithers et al., 1983; Proulx, McKibben, & Lusignan, 1996). Pithers et al. (1983) were one of the first to talk about the relationship between negative emotional states and sexual fantasies in their relapse prevention (RP) model of sexual offending. They construed negative emotional states as high-risk situations that threaten an offender's sense of self-control, which if not effectively dealt with using appropriate coping strategies can lead to the use of deviant sexual fantasies. Pithers et al. referred to this as a lapse; a proximal antecedent to a future offence.

According to this model, it can be assumed that negative affective states coincide with the presence and use of sexual fantasies in sex offenders and, accordingly, there has been some research supporting such an assumption. For instance, McKibben et al. (1994) found that rapists reported experiencing rejection, inadequacy, anger, humiliation, and loneliness following an interpersonal conflict. More importantly, they found a significant relationship between negative mood and the presence of deviant sexual fantasies. They also found that negative mood states coincided with masturbatory behavior during the deviant fantasizing. For child molesters, negative mood coincided with overwhelming deviant fantasies but was not associated with masturbatory activity whilst fantasizing. The most common emotions experienced by child molesters following a conflict were loneliness and oppression. Similarly, in a follow-up study by Proulx et al. (1996), a significant relationship was also found between certain negative affective states and deviant sexual fantasy. For example, anger, loneliness and humiliation coincided for rapists; loneliness and humiliation for heterosexual pedophiles; and loneliness for homosexual pedophiles. What is evident from both studies is how common loneliness is reported as a

coinciding affective state across different offender types. Indeed, McKibben et al.'s data shows that loneliness was the most frequently self-reported affective state by both rapists and child molesters.

Looman (1995) used questionnaires and interviews to establish the frequency of fantasy use in child molesters, rapists, and non-sex offenders, along with the emotional conditions under which they typically occur. It was found that child molesters were more likely to fantasize about a child after experiencing a negative emotional state, which included feeling depressed, rejected by a woman, angry, and having an argument with a spouse. Although loneliness was found to precede child-related fantasies more often than adult fantasies, unlike most other studies, the result did not reach significance. Looman also mentions that the rapists were more likely to use deviant fantasies about an adult when feeling angry.

Despite the supportive value provided by these studies, it has been noted that they are based upon retrospective data and so could be susceptible to distorted recall (Howells et al., 2004). Accordingly, Looman (1999) conducted a study that required offenders to record their fantasies and emotional states in an ongoing diary, thus, allowing for real-time data to be collected. Similar to the retrospective studies, a relationship between deviant fantasy and negative affective states was observed, with feelings of inadequacy, loneliness, and depression being most strongly associated.

Collectively, these studies appear to support the hypothesized relationship between negative affective states and deviant sexual fantasy. However, contrary to Pithers et al.'s RP model, they do not support the idea that the relationship is mediated by an ineffective or failed coping strategy. Instead, the research suggests that deviant sexual fantasies are themselves a type of coping strategy, albeit, an inappropriate one. A study by Cortoni and Marshall (2001) provides additional support for this idea, as

they found that sex offenders were more likely than non-offenders to report using deviant sexual activity (including fantasies) as a coping mechanism. Further, in line with the other studies, loneliness and intimacy deficits were found to be most strongly related to this kind of coping. Cortoni and Marshall also found that nondeviant, appropriate sexual activity (including fantasies) were used as a method of coping and, in fact, were used more often than deviant ones. This suggests that sex offenders use sexual activity in general as a way of coping with negative affective states. Thus, further research should be undertaken to establish the factors that influence an offender to use deviant fantasies over nondeviant, and vice versa, when facing negative affective states. Research has also shown that some offenders experience negative affect (e.g., guilt and shame) as a *result* of using deviant sexual fantasies (Looman, 1995). This may lead to further deviant fantasizing, thereby creating a self-perpetuating —vicious-cycle || . This idea is consistent with reports that sexual offenders use self-degrading coping strategies that ironically increase their negative affective states (Neidigh & Tomiko, 1991). However, there is no direct research investigating this with regards to fantasies and so needs to be corroborated.

With regards to how sexual fantasies actually regulate affect, Gee et al. (2003) have identified three distinct ways from their qualitative study; (1) the alleviation of a negative affect; (2) the elevation of an ambivalent mood/ affective state; and (3) the enhancement of a pre-existing positive mood/affective state. This demonstrates that the sexual fantasies of a sex offender are not restricted to only dealing with negative affective states, as previous models have assumed, but rather the regulation of affect more generally. This is an important finding, especially for practitioners, as it suggests that the successful treatment of negative emotions may not be sufficient in

reducing the use of deviant fantasies as an offender may still use them to enhance a positive mood/affective state.

Gee et al. also noticed that offenders reported using sexual fantasies as a means of 'coping' with real or imagined threats, either by escaping from the reality of the situation or by exerting some form of control over it. It is not made explicitly clear as to whether these threats include negative affect or affective states but the idea of escaping into a 'fantasy world' has been alluded to by others as a means of dealing with negative emotions (e.g. Arrigo & Purcell, 2001; Hunter, Ram, & Ryback, 2008). The process by which deviant sexual fantasy acts as an escape may be explained by the concept of cognitive deconstruction (Baumeister, 1991); a process that allows one to detach from the self, typically when facing negative affect. This is achieved by a shift in attention from abstract-levels of self-awareness to concrete-levels, resulting in basic sensations and movements becoming focused upon. Further, this level of self-awareness is guided by proximal goals, dominated by rigid and superficial thinking, and involves a cutting-off from efficient self-evaluative processes. Ward, Hudson, and Marshall (1995) were the first to apply the concept of cognitive deconstruction to sex offenders, proposing that offenders escape from self-awareness as a means of dealing with stressful situations and this concept has been recognized as being an innovative and comprehensive framework for understanding negative affect in sex offenders (see Howell et al., 2004; Mann, 2004). Interestingly, Ward et al. state that sex is the most efficient behavior for reducing self-awareness, suggesting that fantasies involving sexual behaviors may also suffice. Additionally, since cognitively deconstructed states hinder self-evaluative processes and lower inhibitions, the chances of an offender using deviant imagery may increase. This is certainly an interesting area for future research, but has surprisingly received little attention.

The research to date clearly demonstrates that a relationship exists between sexual fantasies and affect. However, in order to understand this link more fully, more needs to be done to establish the causal direction, and whether the link is specific to sex offenders or evident among non-sex offender populations as well (McCoy & Fremouw, 2010). In addition, some other problematic areas need to be investigated. Firstly, efforts should be made to confirm what should be regarded as an emotion, mood, and affective state, as these terms appear to be used interchangeably within the literature. Moreover, some of the examples of moods and emotions are questionable. For example, Looman (1995) categorized female rejection and arguing with a spouse as being negative moods. Arguably, these may be better construed as situations that *evoke* a negative mood. Indeed, Marshall and Barbaree (1990) claim that female rejection can lead to loneliness which in turn leads to the use of deviant fantasies. Thus, future research should aim to clarify the meanings of various affective labels as this will have important implications for offenders in treatment who are trying to identify potential fantasy triggers.

Secondly, most of the research has focused solely on *negative* emotions and affect. However, some research has shown that there is a relationship between positive emotions and sex offenders' sexual fantasies. For example, it has been found that child molesters tend to use *appropriate* sexual fantasies when in a positive mood (Looman, 1995). Conversely, Gee et al. report that offenders often use deviant fantasies to enhance a positive mood. These conflicting findings could be explained by Ward and Hudson's (1998) Self-Regulation model, which states that negative affect is mainly associated with offenders who try to avoid offending and, as a consequence, use inappropriate fantasies. Thus, it may be these types of offenders who use appropriate fantasies when in a positive mood. On the other hand, Ward and

Hudson state that offenders who are motivated to offend (i.e., approach offenders) often experience positive affect with regards to their offending. Thus, these offenders may actively use deviant sexual fantasies to induce or enhance positive affect and emotions. Clearly more research is needed to better understand the relationship between positive affect and the use of sexual fantasies.

Finally, the physiological effects of emotion and fantasy should also be investigated. For example, a number of studies found that *self-reported* anger was associated with deviant fantasy use (McKibben et al., Looman, 1995), yet Myers, Husted, Safarik, and O'Toole (2006) explain how the physiological process of anger has an inhibitory or anti-erectile effect, implying that the likelihood of an offender using masturbatory fantasies when angry is low. Clearly, more research is needed using alternative methodologies in order to clarify such issues and develop our understanding of how affect and fantasy interrelate.

Sexual fantasy and personality

There has been limited research investigating the interaction between deviant sexual fantasies and personality. Within the few studies that have been conducted, three areas have been of particular focus. These include how certain personality characteristics relate to: (1) the differences between deviant fantasizers and nondeviant fantasizers (Curnoe & Langevin, 2002); (2) the link between deviant fantasies and behavior (Williams et al., 2009); and (3) the adaptive coping strategies used to deal with deviant fantasies (Lussier, Proulx, & McKibben, 2001).

In order to determine whether certain (pathological) personality features could distinguish deviant fantasizers from non-deviant fantasizers, Langevin and Curnoe (2002) tested a sample of 228 sex offenders and non-sex offenders using the

Minnesota Multiphasic Personality Inventory (MMPI). They hypothesized that deviant fantasizers would show greater psychopathological features but, appreciating the heterogeneity among sex offenders, also expected mixed MMPI profiles. They found that deviant fantasizers scored higher than non-deviant fantasizers on various MMPI scales, such as Psychopathic Deviate, Masculinity-Femininity, Paranoia, and Schizophrenia scales, which were also found to be clinically significant. Interestingly, deviant fantasizers were also found to score higher on the Social Alienation, Emotional Alienation, and Self Alienation subscales, which may account for why many sex offenders often report experiencing loneliness, especially among those who use deviant sexual fantasies. Langevin and Curnoe argue that the high paranoia scores may contribute to these high levels of social alienation. They also claim the high levels of social alienation allow deviant fantasizers to objectify their victims more readily, which increases the likelihood of them acting out their fantasies. This risk may be increased by the fact that deviant fantasizers also scored high on the Defective Inhibition subscale. Thus, they conclude that attention should be given to the personality of deviant fantasizers during forensic clinical assessments.

Recently, William et al. (2009) investigated whether certain personality traits can predict or moderate the relationship between deviant sexual fantasies and deviant sexual behavior. Using a sample of 88 non-offenders, they measured a variety of fundamental personality variables, such as the 'Big Five' (i.e. openness, conscientiousness, extroversion, agreeableness, neuroticism; McCrae & Costa, 1987), as well as the so-called 'Dark Triad' (i.e. narcissism, machiavellianism, psychopathy; Paulhus & Williams, 2002). Their results showed neuroticism and psychopathy to be the only correlates of overall deviant fantasies. Further inspection revealed that the former was related more strongly to fantasies of frotteurism and bondage, whereas

psychopathy was associated with bondage and sadism. Further, when the three traits of the Dark Triad were analysed simultaneously, in order to control for the overlap among them, psychopathy was found to be the strongest predictor.

Further to this, Williams et al. found that psychopathy moderates the fantasy-behavior link. In other words, deviant sexual fantasies are more likely to be translated into deviant sexual behaviors in individuals with high psychopathy scores. Separate analyses showed that this moderated association was in the positive direction for all of the nine deviant categories measured, but only reached significance for sexual assault. Taken together, this study suggests that, in non-offending males, psychopathy is related to sexual fantasies of bondage, sadism, and sexual assault, which are arguably the most aggressive forms of sexual deviance. However, counter to Williams et al.'s results, Skovran, Huss, and Scalora (2010) found no relationship between psychopathy and sadomasochistic fantasies in a sample of 36 psychopathic sex offenders. This could indicate a difference between psychopathic sex offenders and psychopathic non-offenders with regards to sadistic sexual fantasies, or it could be due to methodological differences, as Williams et al. measured 'subclinical psychopathy' via a self-report measure, whereas Skovran et al. used the Psychopathy Checklist- Revised (PCL-R; Hare, 2003).

As well as moderating the link between fantasy and behavior, psychopathy may also increase the likelihood of using deviant sexual fantasies. For example, in an unpublished paper, Freimuth found that a substantially greater number of psychopathic sex offenders reported using deviant sexual fantasies than non-psychopathic sex offenders, although this did not reach significance. Similarly, Skovran et al. found that psychopathic sex offenders (PCL-R score >25) reported a significantly greater number of sexual fantasies compared to nonpsychopathic sex

offenders, as well as a greater diversity of sexual fantasies. Thus, in light of these studies, it can be argued that psychopathy increases the likelihood of an individual engaging in and acting out a deviant sexual fantasy.

Personality characteristics have also been examined to see whether they relate to the coping strategies used to deal with deviant sexual fantasies. For example, Lussier, Proulx, and McKibben (2001) found that their sample of 42 sex offenders could be characterized as having either a dramatic or an anxious personality profile, as measured by the Millon Clinical Multiaxial Inventory (Millon, 1983). Dramatic profiles were marked by good social skills, greater assertion, and higher self-esteem, whereas offenders with an anxious profile showed lower social skills and self-esteem, as well as greater anxiety. Moreover, anxious offenders reported more deviant sexual preferences and greater levels of loneliness compared to those with dramatic profiles. Again, this demonstrates the importance of loneliness in some offenders. It also shows how personality should be a factor to consider when assessing and treating an offender with deviant sexual fantasies.

Despite the contrasts, no differences were found between the two personality types concerning the coping strategies used to deal with deviant sexual fantasies. Instead, the results showed that both groups regarded fantasy modification as being the most effective coping strategy. However, compared with dramatic offenders, anxious types were less effective at dealing with their deviant fantasies. The authors suggest that this could be because, due to having more deviant preferences, they experience more overwhelming fantasies. They also propose that, as a consequence of their low self-esteem, anxious offenders may believe they are incapable of effectively coping and so do not attempt to, thus, creating a type of self-fulfilling prophecy.

To sum, the few studies examining the relationship between personality and deviant sexual fantasies show that certain traits can be of importance, particularly psychopathy. Also, certain other traits (i.e., social alienation, paranoia, defective inhibition) and types (i.e., anxious) appear to relate to other correlates of deviant fantasy such as loneliness, thus providing valuable insight into how fantasies may develop in some offenders. However, the current conclusions are based upon a very small number of studies, indicating the need for more research in this area.

Sexual fantasy and behavior

Sexual fantasies share a close relationship with behavior as they depict sexual behaviors that can be -and often are - acted out. Also, sexual fantasies are sometimes paired with other behaviors such as masturbation, the viewing of pornography, sexual phone calls, the recording of the fantasies through writing, drawings, and video/audiotapes, and the enactment of the fantasy with a consensual partner. All of these can be regarded as fantasy-related behaviors, or 'extensive productions' of a fantasy (Meloy, 2000). However, a crucial area for both forensic theory and practice relates to the link between deviant sexual fantasies and offence-related behavior. In other words, how, why, and when does a deviant sexual fantasy translate into or influence a sexual offence? Although it has been a commonplace idea that a direct causal link exists, there is actually little evidence to support the idea that fantasy alone can result in the commission of an offence (Grubin, 1999; Leitenberg & Henning, 1995). Indeed, it is becoming more widely recognized that there are various etiological pathways accounting for why a sexual offence may occur, each involving a combination of different cognitive, emotional, and motivational factors that may or

may not include the use of deviant fantasies (Ward & Siegert, 2002; Ward & Beech, 2006; although see Knight & Sims-Knight, 2003).

From the research that has been conducted on deviant fantasies and offending behavior, findings suggest that fantasy can play two roles. The first involves increasing the risk of an offence occurring, which as discussed earlier, is the most fitting conceptualization of a deviant sexual fantasy. This idea is supported by research showing that some offenders use deviant sexual fantasies before they ever commit a sexual crime. For example, Abel et al. (1987) found that, in a sample of 400 outpatient sex offenders, 58% ($n = 232$) reported using deviant sexual fantasies before the age of 18, which they later acted out. Further, Marshall and Eccles (1991) found, in a sample of 129 child molesters, 22% ($n = 28$) used child-related fantasies before any sexual involvement with a child. MacCulloch, Snowden, Wood, and Mills (1983) found that 13 out of 16 of their sex offender sample reported spending long periods of time masturbating to sadistic fantasies (including rape, sodomy, kidnap, bondage, flagellation, torture, and killing) before committing their offences. More recently, Dandescu and Wolfe (2003) found that 64.9% of 57 ($n = 37$) child molesters and 76% of 25 ($n = 19$) exhibitionists self-reported using deviant fantasies prior to their first offence.

Gee et al.'s (2004) interview study provides some more detailed insight. From a sample of 24 sex offenders, 75% ($n = 18$) reported using nonspecific offence fantasies (i.e., fantasies about general aberrant activities rather than a specific offence). The use of this type of fantasy steadily increased as the offenders moved through the early stages leading up to their first offence. This was the only time that nonspecific fantasies were used. At the time of their initial offence, nonspecific fantasies were replaced by the use of offence-specific fantasies (i.e., fantasies

containing information about a specific offence, such as crime location or victim characteristics). From this point onwards, offenders continued to use offence-specific fantasies, although general fantasies were also used during relapse phases. Gee et al. argue that the use of nonspecific fantasies are a stepping-stone to sexual offending because they increase the risk of an offence occurring due to the individual becoming desensitized to the deviant themes and behaviors imagined within the fantasy. The second way that fantasies may influence an offence is by exerting an effect on the pattern of behaviors displayed during an offence, commonly referred to as the modus operandi. For example, predatory (or approach) sex offenders who pre-plan and show more organization in their offences are said to actively act upon their fantasies, suggesting that their fantasies will reflect their organized modus operandi. Deu and Edelman's (1997) study provides some empirical support for this contention. Using Schlesinger and Kutash's (1981) projective technique designed to elicit criminal fantasies (including sexual assault, child molestation, and exhibitionism) by having offenders describe what they think is occurring in a set of ambiguous pictures, they found that predatory sex offenders described scenarios that were significantly more planned, organised and elaborate than those produced by opportunistic sex offenders, nonsexual offenders, and non-offenders. Consequently, the authors conclude that predatory sex offenders are characterized by an organized and elaborate fantasy life that influences their pattern of offending. However, it should be noted that it is the theoretical assumption of the researchers that the descriptions of the offences produced by the sex offenders reflects their personal sexual fantasies. Perhaps future research could be conducted using this projective technique whereupon the researcher also measures the offender's self-reported fantasies (e.g., using a questionnaire) in order to ascertain whether they are correlated.

Other research using post-offence information also provides some support. For instance, Warren, Hazelwood, & Dietz, (1996), using information from case files, report that 16 out of 20 sadistic sexual murderers showed evidence of violent sexual fantasies that had been assimilated into their ritualized, repetitious offences. Furthermore, Leclerc, Carpentier, and Proulx (2006) observed that child molesters were more likely to use a manipulative strategy during their offending, as opposed to a coercive one, if they used deviant sexual fantasies 48 hours prior to the offence. Also, using information from a research-based network containing actuarial scores and other research-based risk factors, Friemuth (2002) found a significant positive relationship between violent sexual fantasies and weapon use during an offence. Specifically, in a sample of 42 high risk sex offenders who used violent sexual fantasies, 69% ($n = 29$) had used a weapon during at least one of their offences, whereas those who used consensual ($n = 27$) and child-related ($n = 34$) fantasies did not use a weapon in any of their offences. It should be noted that, unlike Warren et al.'s study, it is unclear whether the content of offenders' fantasies in Leclerc et al.'s and Friemuth's research involved manipulation and weapon use, respectively. Without this information it is difficult to confidently conclude that their modus operandi was influenced by the content of their fantasies. Thus, future research should aim to record the details of an offender's fantasy and identify whether the specific behaviors noted within the content match their offence behavior.

The research examined here provides some support for the idea that deviant sexual fantasies influence offending behavior, whether it be by contributing to the likelihood of an offence occurring or to the actual behavior performed during an offence. Now we will look at some theoretical accounts that may help explain how deviant fantasy influences offending behavior. Firstly, though, it is important to

realize the heterogeneity evident among sex offenders as this will have an effect on how a sexual fantasy is used and, in turn, how it influences an offence. Thus, we will discuss the various fantasy-behavior theories within the framework of the approach/avoidant dichotomy proposed by Ward and Hudson (1998) in their Self-Regulation model. Ward and Hudson describe a nine-stage model of offending that addresses both the individual's goals with respect to offending behavior (*approach* versus *avoidant*) and the manner in which these goals are achieved (*passive* versus *active*), thus resulting in four pathways that lead to sexual offending. Offenders with approach goals are motivated to offend and do so either actively (*approach-explicit*) or only when the opportunity arises (*approach-automatic*). Offenders who have avoidant goals do not want to offend but do so because they either do nothing or lack the skills to appropriately avoid offending (*avoidant-passive*), or employ ineffective or counterproductive strategies to not offend (*avoidant-active*). Gee et al. (2003) found that offenders' sexual fantasies can function as a model for future behavior, either implicitly (via the rehearsal or re-living of previous offences) or explicitly (via the simulation of future offending behavior). The authors suggest that the use of sexual fantasy for reasons of rehearsal is associated with avoidant offenders, whereas the use of fantasies to simulate future behavior is related more to approach offenders.

Hudson and Ward (2000) claim that offenders who wish to avoid offending often experience overwhelming stressful life events and negative affect that overload their coping resources. This can result in a desire for deviant sexual activity, which the offender wishes to refrain from doing. For some offenders, it is at this point that deviant fantasizing can increase their risk of offending as it can contribute to a loss of control. Furthermore, the extensive use of deviant sexual fantasies provides the means for implicit offence-scripts to be created, defined as mental representations about an

offence that are outside the offender's conscious awareness (Ward & Hudson, 2000). Put simply, deviant fantasies, unbeknownst to the offender, can act as a 'mental simulation' for future offences. For example, an *avoidant-active* offender may repeatedly use deviant sexual fantasies as a substitute to offending, mistakenly thinking that it is an effective coping strategy to avoid offending (Elliot & Beech, 2009). However, by repeatedly fantasizing, he is unwittingly creating an implicit-offence script that may be activated and acted out if the relevant internal cues (i.e., negative affect) and/or external cues are present (i.e., environmental factors that match those in his fantasy). Beres (1960) states that fantasy may be a substitute for action or it may prepare the way for later action. In light of the above, *sexual* fantasy may be both, (i.e., a substitute for action that can ironically lead to future action).

Ward and Hudson (2000) argue that the process by which an implicit plan and offence-script translate into offensive behavior involves the use of 'seemingly unimportant decisions' (SUDs); that is, seemingly unimportant decisions that heighten the risk of a sexual offence. Thus, an offender may repeatedly engage in a fantasy that starts with a child smiling at him and ends with the child being taken and abused (an implicit offence-script). The offender then makes a SUD to go to the store at the time when children are getting out of school and finds himself amongst many young school children, one of whom smiles at him. This triggers the offence-script and the fantasy unfolds into reality; seemingly as the result of little or ineffective self-regulatory strategies (Ward & Hudson, 2000). Gee et al. (2003) report that some sex offenders within their sample used offence-focused fantasies with no intention of reoffending, but still ended up carrying out the fantasy in the form of an offence. The authors argue that these offenders had created and enacted an implicit offence-script.

Offenders with *approach-automatic* goals also harbour over-learned, automated behavioural scripts designed to lead to a sexual offence (Hudson and Ward, 2000). According to Ward et al. (2005), *approach-automatic* offenders can also form these offence-scripts through extensive deviant fantasizing. The difference here is that, because they have no objections about offending and experience positive post affect, approach-automatic offenders are likely to fantasize for reasons different to those of the avoidant offender. For example, instead of being an inappropriate coping strategy, they may fantasize as a way of reliving a past offence, or inducing sexual arousal.

Offenders who exhibit *approach-explicit* goals have a conscious desire to sexually offend, strategically plan their offences, and experience positive post-offence affect (Ward & Hudson, 2000). This type of offender profile is consistent with that of the preferential/predatory offender (Bickely & Beech, 2002), who actively seeks out opportunities and manipulates their environment in order to commit an offence. Thus, it can be argued that sexual fantasies will be used by these types of offenders as way of actively planning a future offence and refining their modus operandi. Indeed, the available research suggests that sexual fantasies used by these types of offenders have a more direct influence on their offending behavior (Deu & Edelman, 1997; MacCulloch et al., 1983). For example, MacCulloch et al. found that, out of the 13 sadistic offenders who reported using recurrent sadistic fantasies, 9 stated that that they performed 'behavioral try-outs'. In other words, certain aspects of their fantasies were carried out in real-life, such as following a girl home in the dark. Results from other research also suggest the use of behavioral try-outs. For example, Warren and Hazelwood (2002) found that sadistic offenders tend to act out elements of their sadistic fantasies with their wives and girlfriends.

Conclusions

The research and literature from over the past few decades has amounted to a wealth of information that can aid us in understanding how the sexual fantasies of sex offenders interacts with other important factors involved in sexual offending. Although the majority of studies have used various methods of measurement (e.g., questionnaires, interviews, phallometry); differ in terms of focus (e.g., frequency, content, function), and type of offender studied (e.g., rapists, child molesters), when examined collectively, they provide valuable insight into the multifaceted nature of sexual fantasies. They also present various avenues for further study by highlighting important gaps in understanding as well as areas that can be 'knitted' with other areas of research and theory, both within and outside the field of sexual offending. The first issue discussed was the definition of deviant sexual fantasy. There have been concerns regarding the use of the term 'deviant' as many studies have revealed that deviant sexual fantasies are not used solely by sex offenders but also by non-offending individuals. However, despite these issues, research indicates that their use, whether an offender or not, is related to various risk factors such as pathological personality traits, offence-supportive beliefs, inappropriate coping, and positive appraisal of the deviant fantasy. Therefore, we suggest use of the term 'high-risk sexual fantasy' with a conceptual definition based on risk rather than just content and arousal. Second, we discussed the relationship between sexual fantasy and sexual arousal/interest. Although, sexual fantasy is theorized to play a role in the development of deviant sexual arousal and interests via conditioning processes, there is surprisingly little research investigating the level of genital sexual arousal elicited

by an offender as a result of actively fantasizing. Instead, the majority of such research has used various forms of sexual stimuli that are believed to match an offender's fantasy or preference. Although such stimuli is sometimes constructed using the offender's help and self-reported sexual interests, it is unclear as to whether this method produces results similar to using fantasies purely imagined or held by the offender (Leitenberg & Henning, 1995). Indeed, research with non-offenders indicates that film, slides, written-text, and spoken text are forms of stimuli that elicit higher levels of sexual arousal than just engaging in sexual fantasy (Julien & Over, 1988). Nevertheless, the available research does indicate a close associative link and so we then discussed two recently proposed theories in order to understand this relationship. One was the cognitive-affective model of sexual arousal (Janssen et al. 2000), in which sexual fantasy appears to play a role. The second theory was 'extended mind theory' (Ward & Casey, 2010) from which we hypothesized that both the internal and external elements of an offender's cognitive structure are required in order to produce and experience a more sexually arousing fantasy. Importantly, EMT can be used to construct a novel theoretical account explaining the relationship between deviant fantasies and pornography (and other external elements) that goes beyond disinhibition (see also Wilson & Jones, 2008). Thirdly, we demonstrated how the positive relationship between the use of deviant fantasies and the presence of negative affect is a rather consistent finding, supporting the various models and treatment strategies that focus on deviant fantasy as a coping tactic. However, the direction of this relationship is unclear. Also, there has been little research examining positive affect and the use of deviant fantasy, as well as the physiological aspects of affect and fantasy use. Thus, more research should be conducted to understand the dynamics of this associative relationship as it could have important treatment implications.

Fourth, we outlined the research examining personality and sexual fantasies. Although there are a limited number of studies, the results offer important treatment and theoretical implications. For instance, one implication is that offenders with anxious personality types should be given additional assistance and positive reinforcement when tackling deviant fantasies during treatment, as they are less effective at managing their fantasies. The finding that psychopathic sex offenders use a greater number and a wider range of sexual fantasies is important for those involved in treatment and risk assessment, as is the finding that fantasy and behavior is mediated by psychopathy. Lastly, we discussed some of the research and theory regarding the contentious relationship between fantasy and behavior. Based on the existing literature, the use of deviant fantasies can both increase the risk of deviant behavior occurring (distal influence) and directly affect it (proximal influence). Furthermore, theory and research indicates that the motivation of the offender (e.g., avoidant vs. approach) dictates how sexual fantasy may affect behavior. More experimental research with offending populations investigating the link between fantasy content and behavior is needed to validate and broaden our understanding. Furthermore, research examining the sexual fantasy of non-offenders and how such fantasies link with behavioral inhibition would also be illuminating. Taken as a whole, the existing research provides us with an understanding of the sexual fantasies used by sex offenders and how they relate to other major factors (e.g., arousal, affect, personality, & behavior). The individual examination of each factor demonstrates the complex and multifaceted nature of sex offenders' fantasies and their role in sexual offending. It should be noted however that, although each factor has been discussed separately, sexual fantasies do not interrelate with these factors in isolation. For example, as discussed in Section 4, offenders with an anxious personality profile experience

greater loneliness and report more deviant preferences, and so find it harder to manage their deviant fantasies. This example demonstrates how the factors of personality, negative affect, and deviant arousal/interest can interrelate and, in turn, affect a sex offender's experience with their sexual fantasies. Thus, efforts should be made to pull together these research findings so that a sound theoretical account of the role deviant sexual fantasy plays in sexual offending can be devised. With the novel avenues for theorizing and future research highlighted throughout this paper, this may not be such an impractical prospect.

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