

**Emotion Goals: What do Sexual Offenders Want to Feel?**

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### Abstract

Sexual offenders typically experience more negative emotions and greater difficulties in regulating emotions than non-offenders. However, limited data exist on what sexual offenders *want* to feel (i.e., their emotion goals). Notably, emotion goals play a key role in emotion regulation and contribute to emotional experience. The present study tested whether sexual offenders ( $N=31$ ) reported higher scores for negative emotion goals and lower scores for positive emotion goals, compared to general offenders ( $N=26$ ) and non-offenders ( $N=26$ ). In addition, we tested whether sexual offenders differed from the other two groups in their perceived pleasantness and perceived utility of emotions. Sexual offenders reported greater scores for the emotion goal of sadness, and lower scores for the emotion goal of excitement, compared to both general offenders and non-offenders. State and trait levels of these emotions could not fully account for these differences. Further, sexual offenders reported lower perceived pleasantness for sadness than general offenders and lower perceived pleasantness for excitement compared to both other groups. Finally, sexual offenders reported greater perceived utility of sadness than non-offenders. These novel findings and their implications for research and interventions are discussed in the context of sexual offenders' emotional dysfunction.

*Keywords:* sex offenders; general offenders; emotion goals; emotion regulation; excitement; sadness

### **Emotion Goals: What do Sexual Offenders Want to Feel?**

The number of sexual offences in several European countries has increased significantly since 2008 (EUROSTAT, 2018).<sup>1</sup> A similar trend has been observed in the United States (Bureau of Justice Statistics, 2016).<sup>2</sup> These crimes have important financial, social and psychological costs. For example, in the United Kingdom an analysis for the Home Office (2017) revealed that the financial impact of sexual assault alone is £2.5 billion per year, whereas in the US the cost goes up to \$283626 per victim (Heaton, 2010).<sup>3</sup> Given its financial, psychological and social ramifications, psychological research has long been interested in gaining a better understanding of the processes associated with sexual offending. Such understanding can provide valuable insights into the mechanisms that accompany the risk for sexual offending, as well as useful targets for interventions aimed at reducing (re)offending.

A burgeoning literature has focused on the emotional functioning of sexual offenders. Such literature has shown that sexual offenders often report frequent and intense negative emotional experiences and experience difficulties in regulating emotions (Gillespie & Beech, 2016; Ward & Beech, 2016). Thus, these factors represent common objectives to address in the treatment of sexual offenders (Carter & Mann, 2016; Gillespie, Mitchell, Fisher, & Beech, 2012). In other words, existing research has shown that sexual offenders differ from non-offender controls in the way they feel and in the extent they are successful in regulating their emotions (Gillespie, Garofalo, & Velotti, 2018). What we do not know yet, however, is whether offenders are different in the direction in which they want to regulate their emotions – that is, in their *emotion goals* (i.e., what people *want* to feel). Importantly, this approach considers

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<sup>1</sup> Retrieved on May 17, 2019, from: <http://appsso.eurostat.ec.europa.eu/nui/submitViewTableAction.do>

<sup>2</sup> Retrieved on May 17, 2019, from: <https://www.bjs.gov/index.cfm?ty=pbdetail&iid=6427>

<sup>3</sup> Retrieved on May 17, 2019, from: [https://www.rand.org/content/dam/rand/pubs/occasional\\_papers/2010/RAND\\_OP279.pdf](https://www.rand.org/content/dam/rand/pubs/occasional_papers/2010/RAND_OP279.pdf)

emotions not as automatic responses but as processes that can be changed depending on the superordinal standard or goal one aims to achieve (Tamir, 2016).

Notably, endorsing an emotion goal as an emotion that an individual wants to feel more, may indicate either a greater preference for that emotion, or a lower aversion for that emotion. Because this study cannot speak to this nuance in distinguishing approach- and avoidance-emotion goals, we refer to emotion goals as 'wanted' in relative terms. For example, one person may want to experience relatively more sadness than the other, even when both people want to experience only low levels of sadness. Indeed, such differences have been found when comparing certain clinical populations to control groups (Lopez-Perez, Ambrona, & Gummerum, 2018). Furthermore, although they reflected only relative and not absolute preferences, these differences nonetheless had important clinical implications (Millgram, Joorman, Huppert, & Tamir, 2015). Therefore, the present investigation tested whether sexual offenders differ from general offenders and non-offenders in their emotion goals. If such differences are found, they may add to our current understanding of emotional dysfunction in sexual offenders.

### **Emotional Experiences and Emotion Regulation in Sexual Offenders**

Although there is considerable variability among individuals who commit sexual offenses, on average, sexual offenders have been characterized as experiencing negative emotions – including anger, fear, sadness, and general distress – more often and more intensely compared to other offender groups and non-offenders (Gillespie et al., 2012; Howells, Day, & Wright, 2004). Gillespie et al. (2012) and Howells et al. (2004) have reviewed the evidence for socio-affective difficulties that characterize individuals who commit sexual offenses, including a greater tendency to experience negative emotions compared to non-offenders. In addition, among sexual offenders, those reporting greater levels of negative emotions and difficulties regulating

emotions tend to be more likely to recidivate after discharge (Gillespie et al., 2012). These negative emotional experiences are often triggered by problems in social relationships, typically related to the fear of intimacy and loneliness that characterizes sexual offenders (Martin & Tardif, 2015). Furthermore, the emotional experiences of sexual offenders may be partly influenced by their distorted cognitive processes, which leads to biases in social perception and to increased negative affect (Barnett, 2011; Ward & Beech, 2006). For instance, Mann and Beech (2003) have argued that negative emotional states can be triggered by sexual offenders' perception that they must be in control of others, or others will hurt them, hence feeling threatened by their social environment. In turn, negative affective experiences have been linked with deviant sexual ideation and are considered consequential for the enactment of sexual offending behavior (Gillespie et al., 2012; Howells et al., 2004). Although it is possible that similar difficulties in emotional functioning characterize offenders more generally (as opposed to sexual offenders specifically), very few studies have directly compared sexual and non-sexual offenders (for exceptions, see Gillespie et al., 2015; Gillespie et al., 2018). Specifically, only one previous study compared them on emotional experiences – focusing on anger in particular – showing that violent offenders reported greater levels of trait anger than sexual offenders (Gillespie et al., 2018). More importantly, the sexual offender and violent offender groups were characterized by different profiles of socio-affective functioning, with sexual offenders having a more circumscribed pattern of dysfunction, highlighting the need to investigate differences between offender groups to develop tailored interventions.

The heightened experience of negative emotions in offenders can be explained by how they might perceive the controllability of emotion. In fact, research has found that offenders experience difficulties in regulating their own emotions (Velotti et al., 2017). However, emotion

dysregulation has been linked to both violent (Garofalo, Velotti, & Zavattini, 2018; Roberton, Daffern, & Bucks, 2014) and sexual offending (Davey, Day, & Howells, 2005; Gillespie & Beech, 2018; Ward & Hudson, 2000). The difficulties offenders experience in controlling their own emotions have been linked so far with the use of maladaptive regulation strategies. For instance, some evidence suggests that sexual offenders may have specific problems in the over-control of emotional responses (Davey et al., 2005), often engaging in rumination (i.e., repetitively thinking about what happened and their emotional experience) and having difficulties in shaking off negative emotional experiences (Barnett, 2011; Gillespie et al., 2012).

### **A Missing Piece: What Do Sexual Offenders Want to Feel?**

It is possible that sexual offenders' emotion dysregulation is also linked to difficulties in pursuing or enacting healthy emotion goals. In this sense, offenders may lack the motivation to change their emotions in adaptive directions or the skills to achieve these goals. Previous research has shown that emotion goals are central to the emotion regulation process as they set the direction of emotion regulation efforts, shaping emotional experience by bringing it closer to the desired emotion (Mauss & Tamir, 2014; Tamir, Bigman, Rhodes, Salerno, & Schreier, 2015). In fact, previous studies in other populations have shown that, for example, emotion goals are altered in some forms of psychopathology (Lopez-Perez et al., 2018; Tamir & Millgram, 2017). Based on the idea that one's own emotional experience can influence emotion goals, it was evaluated whether people with depression who tend to experience high levels of sadness may be more likely to report that they *want* to feel sad. Results confirmed not only an increased self-reported wanting for sadness, but also showed that depressed patients selected more often sadness-inducing stimuli in the laboratory (Millgram, Joormann, Huppert, & Tamir, 2015). Furthermore, emotion goals in people with depression have been found to prospectively predict

depressive symptoms (Millgram, Joormann, Huppert, Lampert, & Tamir, 2018). Hence, emotion goals might be key for explaining emotion dysregulation not only in clinical populations but also in offenders. As mentioned above, although they can be considered in absolute terms (e.g., wanting to feel happy rather than sad), emotion goals are often considered in relative terms (e.g., how much happiness or sadness some people want to feel, compared to other people). There is evidence for substantial variation in what people want to feel, and some of this variation characterizes clinical populations. For instance, like healthy individuals, people who suffer from depression want to feel happiness more than sadness. However, people who suffer from depression want to feel less happiness and more sadness than healthy individuals do. Such differences, in turn, have been found to prospectively predict clinical symptoms during stress (Millgram et al., 2015). Such studies demonstrate the importance of identifying potentially unique patterns of emotion goals in sensitive populations.

The idea that people may *want* to feel negative emotions may appear counterintuitive at first glance. From a hedonic perspective, emotions are evaluated depending on their emotional valence. That is, positive emotions are considered inherently good, and negative emotions inherently bad. Hence, it is assumed that people would normally be motivated by short-term hedonic emotion goals (i.e., feeling good). However, consistent with an instrumental approach to emotion regulation, there is now considerable evidence that people want to experience emotions to achieve either hedonic or instrumental goals (for a review, see Tamir, 2016). Furthermore, some people in some contexts want to experience negative emotions or avoid positive emotions (e.g., Tamir, Mitchell, & Gross, 2008; Tamir & Ford, 2012).

People may be motivated to experience emotions for various reasons. One of these factors concerns attitudes toward emotions, that is, the perceived pleasantness of specific

emotions (Harmon-Jones, Harmon-Jones, Amodio, & Gable, 2011). People may differ in the emotions they want to feel (i.e., emotion goals) because of the pleasure they derive from those experiences (e.g., 'I *enjoy* feeling happy, hence I *want* to feel happy'). Another factor involves people's beliefs about the utility of specific emotions (Tamir et al., 2015). That is, people may differ in the emotions they want to feel because they believe certain emotions are more likely to lead to instrumental benefits, such as gaining a sense of self-coherence, or maintaining social bonds (e.g., 'I *think feeling happy will help me make friends, hence I want to feel happy*'). Such beliefs about the utility of emotions could be either general or context-specific.

Previous research with adults has found that when people were presented with a *collaboration* context they reported greater scores for the emotion goal of happiness, whereas they reported greater scores for the emotion goal of anger if presented with a *confrontation* context (Ford & Tamir, 2012). These differences in wanting to feel happiness or anger were linked to the perceived utility of these emotions. People indicated that they wanted to feel more of those emotions that they found more useful in those contexts (Tamir & Ford, 2012). Furthermore, this context-sensitivity for emotion goals and perceived utility of emotions have been linked to higher well-being (Kim, Ford, Mauss, & Tamir, 2015). Hence, some individuals consider anger a more useful emotion, regardless of the context, whereas other individuals consider anger useful in specific contexts (e.g., confrontations). Context sensitivity in instrumental emotion regulation is linked with better psychological and interpersonal adjustment (Ford & Tamir, 2012; Tamir & Ford, 2012).

If sexual offenders report greater levels of psychopathology than the general population, greater levels of negative affective experiences and difficulties in regulating them, it may be that sexual offenders also endorse more negative emotion goals (i.e., preferences for or less aversion



to negative emotions). Sexual offenders' potential goals to experience negative emotions may be explained by the fact that they present more cognitive distortions (Ward & Beech, 2016), which contribute to dysfunctional knowledge about the utility of emotions, that is, they believe negative emotions are more useful, regardless of the context. Alternatively, sexual offenders may be more familiar with, and hence less averse to, the experience of negative emotions, and may have more positive attitudes toward them. Both routes could contribute to differences in emotion goals, with a tendency to want to experience more negative emotions and less positive emotions than other populations. Negative emotion goals, in turn, may partly explain why sexual offenders engage in maladaptive emotion regulation strategies (e.g., rumination), have difficulties in down-regulating negative emotions, and tend to experience negative emotions more frequently and intensely. Finally, as mentioned above, differences in emotion goals, as well as in beliefs about the utility of emotions, may be context-dependent or generalized across contexts in sexual offenders (Tamir et al., 2015). To our knowledge, no research to date has assessed emotion goals or beliefs about emotions in offender populations. Given that differences in emotion goals may inform people's efforts to regulate their emotions, it is important to study how sexual and general offenders as compared to controls would like to feel in different goal-salient contexts.

### **The Present Study**

In an effort to advance research on the emotional functioning of sexual offenders, the present investigation was the first to assess emotion goals in sexual offenders. We focused on four emotions that have traditionally been studied in research on sexual offending, namely: anger, fear, sadness, and excitement. We focused on these emotions in particular, because prior research has shown that sexual offenders have difficulties particularly in the regulation of negative emotional states (Gillespie et al, 2012; Ward & Hudson, 2000). Further, the assessment

of excitement provides an alternative high-arousal, but positive, emotion state. In addition, some research has suggested that deficits in emotion regulation may contribute to the offence process (Howells et al., 2004). We compared sexual offenders with a sample of general (i.e., non-sexual) offenders, as well as a matched sample (in education) of non-offenders from the general population, in order to test whether any difference in emotion goals would be specific to sexual offenders or shared with other offender groups. In addition, we planned to repeat any analysis yielding significant differences, controlling for state and trait levels of the corresponding emotion, to test whether any such difference could be accounted for by differences in the actual experiences of the target emotions, whether at a state or trait level.

We expected sexual offenders to report greater scores for negative emotion goals (i.e., anger, fear, and sadness), and to report lower scores for positive emotion goals (excitement), which might explain why they also experience negative emotions more often and are not successful in down-regulating them. Further, we tested whether emotion goals in sexual offenders are linked to their attitudes toward emotions (i.e., reported pleasure in experiencing specific emotions) and their beliefs about the utility of emotions. This assesses whether sexual offenders report more positive attitudes towards negative emotions and believe these emotions are more useful, compared to non-offenders. Finally, in an exploratory fashion, we examined these questions across different salient contexts (collaboration, confrontation, protection, and openness to experience), without framing any a-priori hypotheses regarding contextual differences. While potential context-effects are better examined in naturalistic or experimental designs, inquiring about certain types of situations in which we make the goal salient (e.g., confrontation, collaboration, etc.) may offer preliminary insight in the direction of investigating context-effects. Given that this was the first investigation of emotion goals in offenders, we

opted to assess both general emotion goals and emotion goals in specific contexts, where higher-order goals are explicitly dictated.

The present study has the potential to provide a novel angle from which to understand the emotional functioning of individuals who have committed sexual and general offenses, respectively. While most research in this area to date has focused on the emotions they *experience*, or on the *deficits* in emotional functioning, little is known about what sexual offenders *want* to feel. Critically, this knowledge is also an important starting point to more comprehensively understand emotion regulation in offenders, given that emotion goals set the direction of emotion regulation efforts.

## Method

### Participants

The sexual offender sample consisted of 31 male sexual offenders who were serving a sentence in prison. Their mean age was 45.23 years ( $SD = 11.96$ ; range = 23-63). The majority of participants in the sexual offenders sample identified as White British ( $N = 20$ , 64.5%), with the other identifying as White Irish ( $N = 2$ , 6.5%), Other White Background ( $N = 3$ , 9.7%), Asian or Asian-British ( $N = 4$ , 12.9%), or Caribbean ( $N = 1$ , 3.2%), with two participants who did not report on their ethnicity. Sexual offenders did not have any non-sexual offense in their criminal history. Thirteen (41.9%) had committed sexual offenses against children, 6 (19.4%) had committed sexual offenses against adults, and 6 (19.4%) had both child and adult victims (information on victim age was not available for the remaining 6 participants, 19.4%). General offenders were 26 adult males on probation after having served their sentences (age  $M = 38.50$ ,  $SD = 10.78$ ; range = 20-62). Twenty-five (96.2%) of them identified as White British, with one participant (3.8%) identified as White Irish. Crimes committed by participants in the general

offender sample were: drug offenses ( $N = 20$ ), firearms/weapon possessions ( $N = 12$ ), fraud or forgery ( $N = 9$ ), motoring offenses ( $N = 18$ ), theft or burglary ( $N = 21$ ), robbery ( $N = 3$ ), violent behavior ( $N = 19$ ), murder/manslaughter ( $N = 2$ ), arson ( $N = 2$ ), criminal damage ( $N = 4$ ), missing bail ( $N = 1$ ), and public order ( $N = 1$ ). None of the participants in the general offender sample had committed sexual offenses. Non-offender participants were 26 adult males recruited from the general population, who reported to having never been convicted of any crime (age  $M = 37.88$ ,  $SD = 10.21$ ; range = 21-59). Twenty-five (96.2%) of them identified as White British, with one participant (3.8%) identified as Other White Background. Control participants were recruited from the local community and through the paid participation pool at some of the authors' institutions. As they were matched in education to the offender groups, they were not necessarily university students. A univariate analysis of variance (ANOVA) revealed a main effect of group on age,  $F(2, 80) = 3.94$ ,  $p < .05$ ,  $\eta^2_{\text{partial}} = .09$ .<sup>4</sup> Post-hoc pairwise comparisons with Tukey Honest Significance Difference (HSD) showed that sexual offenders were on average significantly older than were non-offender participants,  $p < .05$ . Table 1 summarizes information on the educational level and annual income for all participants (the latter not available in the sexual offender sample).

[Insert Table 1 about here]

## Procedures

Sexual offenders were recruited in a category B (medium security) male prison in England. General offenders were tested outside prison, in a room of a third sector organization dedicated to help offenders integrate back into the community. Non-offenders were tested in the laboratories at two of the authors' institutions. For both offender samples, 50 offenders volunteered to participate; and only those who provided consent took part in the study. No other

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<sup>4</sup> Due to this age difference, the main analyses were repeated controlling for age and results were unaltered.

prisons volunteered to take part in the study. For the non-offenders sample, the study was advertised in the research participation pool of the institution as well as in different social media outlets. In all samples, after signing the consent form, each participant completed a questionnaire in a fixed order (i.e., current mood, general and contextualized emotion goals, perception of emotion utility, attitudes towards emotions, and demographics information) in a paper-and-pencil format. In both offender samples, participants were asked if they felt comfortable reading and completing the questionnaire themselves or if they wanted it read to them. If the latter, a research assistant (blind to the study hypotheses) read the questions out loud and asked the participants to fill in their answer. The research assistant was present for both scenarios in case the participant had any questions or needed assistance completing the questionnaire. In the non-offender and general offender groups, upon completion of the questionnaire, participants were fully debriefed and received a shopping voucher worth £4 as a token of appreciation. The sexual offenders group did not receive any payment as this goes against prison regulations.

## Measures

**State emotions.** People often want to feel emotions that reflect what they actually feel (Vastfjall & Garling, 2006). To rule out such potential confounds, it is recommended that studies on emotional preferences control for current emotional experiences (Tamir & Milgram, 2017). We followed these recommendations here. Current emotional experiences were assessed with a standard measure used in previous studies as reviewed by Tamir and Millgram (2017). Simply, participants are asked to indicate the extent to which they were currently experiencing a series of emotions (0 = not at all, 6 = extremely), followed by a list of emotion terms. To assess current excitement (Bono & Vey, 2007), we averaged across ratings of excitement and enthusiasm ( $\alpha = .64$ ). To assess current anger (Ford & Tamir, 2012), we averaged across ratings of anger and

hostility ( $\alpha = .70$ ). To assess current fear (Lopez-Perez, Howells, & Gummerum, 2017), we averaged across ratings of fear and anxiety ( $\alpha = .63$ ). Finally, to assess current sadness (Millgram et al., 2015), we averaged across ratings of sadness and depression ( $\alpha = .72$ ).

**Emotion Goals** (Tamir & Ford, 2012). Participants rated on a 7-point Likert scale, ranging from 0 = not at all to 6 = extremely, the extent to which they generally wanted to feel excitement, anger, sadness, and fear. Emotion goals were measured both in general, and referring to four goal-salient contexts: collaboration, confrontation, protection, and openness to experience. As described for the assessment of state emotions, the terms were presented in counterbalanced order and goals for each emotion were calculated by averaging responses to their two corresponding emotion terms (Excitement goal, *excitement* and *enthusiasm*,  $\alpha = .64$ ; Anger goal, *anger* and *hostility*,  $\alpha = .46$ ; Sadness goal, *sadness* and *depression*,  $\alpha = .72$ ; Fear goal, *fear* and *anxiety*,  $\alpha = .66$ ).<sup>5</sup>

**Attitudes towards emotions.** Participants' ratings of the perceived pleasantness of each emotion were assessed using the scales validated by Harmon-Jones et al. (2011). We assessed the extent to which participants enjoyed feeling joy (as a proxy for excitement; 5-item scale; e.g., "I really like feeling happy";  $\alpha = .74$ ), sadness (6-item scale; e.g., "I like thinking about sad things";  $\alpha = .58$ ), anger (5-item scale; e.g., "I like how it feels when I am angry";  $\alpha = .72$ ) and fear (6-item scale; e.g., "I seek out things that scare me";  $\alpha = .63$ ) on a 7-point Likert scale ranging from 0 = not at all to 6 = extremely.

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<sup>5</sup> Across contexts, the alpha coefficients for anger ranged between .52 and .87, for excitement ranged between .59 and .84, for fear ranged between .52 and .79, and for sadness ranged between .59 and .67. The only exception was an alpha coefficient of .07 for the emotion goal of anger in collaboration contexts. Because of the low internal consistency of the two anger items both as general preferences (i.e., .46) and in collaboration contexts (i.e., .07), those analyses were repeated including the two single items individually and results were unchanged.

**Perceptions of Emotion Utility** (Tamir & Ford, 2012a). Participants rated on a 7-point Likert scale to what extent they thought happiness, anger, sadness, and fear would be useful for collaboration, confrontation, protection, and openness to experience. Further, general beliefs about the utility of emotions were calculated by averaging participants' responses to each emotion term across the four different contexts. Thus, we obtained participants' perceptions of utility of happiness ( $\alpha = .89$ ), anger ( $\alpha = .80$ ), sadness ( $\alpha = .85$ ), and fear ( $\alpha = .86$ ).<sup>6</sup>

## Results

### General Emotion Goals

Table 2 summarizes descriptive statistics and group comparisons for all study variables. Multivariate analyses of variance (MANOVA) were conducted to test multivariate effects of group. There was a significant main effect of group on general emotion goals, Pillai's  $V = .26$ ,  $p < .01$ ,  $\eta^2_{partial} = .13$ . Follow-up univariate analyses with post-hoc pairwise comparisons revealed significant group differences for excitement and sadness. Specifically, sexual offenders reported greater levels of the emotion goal of sadness, and lower levels of the emotion goal of excitement, compared to the other two groups. Notably, these analyses were repeated controlling for state and trait levels of excitement and sadness, respectively. Results involving excitement remained virtually unchanged. However, the differences on the emotion goal of sadness remained significant only when comparing sexual and general offenders ( $p < .05$ ). There were no significant differences for anger and fear.

[Insert Table 2 about here]

### Emotion Goals across Contexts

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<sup>6</sup> Across contexts, the alpha coefficients for anger ranged between .59 and .88, for excitement ranged between .77 and .88, for fear ranged between .57 and .74, and for sadness ranged between .51 and .74.

To analyze whether there were group differences in emotion goals across contexts, we conducted a series of repeated measures ANOVA with Context (emotion goals in collaboration, confrontation, openness, and protection) as a within-subject factor and Group (general offenders, sexual offenders, and non-offenders) as a between-subjects factor. For sadness, there was a main effect of Group,  $F(2, 80) = 39.69, p = .001, \eta^2_p = .33$ , and pairwise comparisons showed that sexual offenders reported greater levels of the emotion goal of sadness than non-offenders ( $d = .78, SE = .25, p = .008$ ), consistent with the previous analyses. There were no differences between general offenders and non-offenders ( $d = .46, SE = .26, p = .24$ ) and general and sexual offenders ( $d = -.31, SE = .25, p = .62$ ). Next, we found a significant effect of Context,  $F(2, 80) = 5.69, p = .001, \eta^2_p = .07$ . Pairwise comparisons showed that participants (across groups) reported greater levels of the emotion goal of sadness in protection as compared to collaboration ( $d = .36, SE = .11, p = .006$ ) or openness contexts ( $d = .39, SE = .11, p = .006$ ). However, there were no significant differences in the emotion goal of sadness in protection and confrontation ( $d = .01, SE = .13, p = .99$ ). There was no significant interaction ( $F(6, 80) = 0.69, p = .66, \eta^2_p = .02$ ).

For anger, the main effect of Group was not significant,  $F(2, 80) = 2.47, p = .09, \eta^2_p = .06$ , in line with the previous analyses. Further, the results showed a main effect of Context,  $F(3, 80) = 56.98, p = .001, \eta^2_p = .42$ , and a significant Context  $\times$  Group interaction,  $F(6, 80) = 3.96, p = .001, \eta^2_p = .42$ . Pairwise comparisons showed that participants reported greater levels of the emotion goal of anger in protection than in confrontation ( $d = 1.04, SE = .19, p = .001$ ), collaboration ( $d = 1.91, SE = .17, p = .001$ ), and openness ( $d = 2.11, SE = .22, p = .001$ ) contexts. Concerning the interaction, pairwise comparisons showed that there were no differences between the groups in collaboration, openness, and confrontation ( $ps > .90$ ). In the context of protection, sexual offenders reported lower levels of the emotion goal of anger as



compared to non-offenders ( $d = -1.76$ ,  $SE = .49$ ,  $p = .002$ ). There were no significant differences between sexual offenders and general offenders ( $d = -1.10$ ,  $SE = .49$ ,  $p = .09$ ) and non-offenders and general offenders ( $d = .65$ ,  $SE = .52$ ,  $p = .63$ ).

For fear, there was only a main effect of Context,  $F(3, 80) = 16.62$ ,  $p = .001$ ,  $\eta^2_p = .17$ . Pairwise comparisons showed that participants reported greater levels of the emotion goal of fear in protection than collaboration ( $d = 1$ ,  $SE = .17$ ,  $p = .001$ ) and confrontation ( $d = .71$ ,  $SE = .16$ ,  $p = .001$ ). There was no difference in the emotion goal of fear in protection and openness ( $d = .26$ ,  $SE = .17$ ,  $p = .74$ ). The effect of Group,  $F(2, 80) = 0.54$ ,  $p = .58$ ,  $\eta^2_p = .013$ , and the interaction,  $F(6, 80) = 1.58$ ,  $p = .15$ ,  $\eta^2_p = .04$ , were not significant.

For excitement, results showed a main effect of Group,  $F(2, 80) = 3.89$ ,  $p = .02$ ,  $\eta^2_p = .09$ , and Context,  $F(3, 80) = 75.54$ ,  $p = .001$ ,  $\eta^2_p = .50$ , but the interaction was not significant ( $F(6, 80) = .90$ ,  $p = .49$ ,  $\eta^2_p = .02$ ). Pairwise comparisons showed that participants reported greater levels of the emotion goal of experiencing excitement in openness compared to collaboration ( $d = .39$ ,  $SE = .13$ ,  $p = .03$ ), confrontation ( $d = 2.12$ ,  $SE = .17$ ,  $p = .001$ ), and protection ( $d = 2.19$ ,  $SE = .18$ ,  $p = .001$ ). Sexual offenders reported a reported lower levels of the emotion goal of excitement than general offenders ( $d = -.81$ ,  $SE = .32$ ,  $p = .04$ ), in line with the previous analyses. However, there were no differences between sexual offenders and non-offenders ( $d = -.71$ ,  $SE = .31$ ,  $p = .09$ ) and general offenders and non-offenders ( $d = .09$ ,  $SE = .34$ ,  $p = .99$ ). Overall, the significant context effects obtained for all emotion goals support the assumption that emotion goals are likely to vary across different (here, goal-salient) situations and suggest that our measure was able to capture this variability.

### **Attitudes towards Emotions**

Next, there was a significant main effect of group on attitudes toward emotions, Pillai's  $V = .26$ ,  $p < .01$ ,  $\eta^2_p = .13$ . Follow-up univariate analyses with post-hoc pairwise comparisons revealed significant group differences for excitement and sadness. Sexual offenders had less positive attitudes toward excitement compared to the other two groups, and less positive attitudes toward sadness compared to the general offender sample (see Table 2 for details).

### **Beliefs about the Utility of Emotions**

To analyze whether there were group differences for the perceived utility of each emotion across contexts we conducted a set of repeated measures ANOVA with Context (perceived utility of each emotion for collaboration, for confrontation, for openness, and for protection) as within-subject factor and Group (general offenders, sexual offenders, and non-offenders) as between-subjects factors.

For sadness, there was a main effect of Group,  $F(2, 80) = 5.14$ ,  $p = .008$ ,  $\eta^2_p = .11$ , and pairwise comparisons showed that sexual offenders reported a higher perception of utility of sadness than non-offenders ( $d = .70$ ,  $SE = .22$ ,  $p = .007$ ). There were no differences between general offenders and non-offenders ( $d = .49$ ,  $SE = .23$ ,  $p = .11$ ) and general and sexual offenders ( $d = -.21$ ,  $SE = .5$ ,  $p = .62$ ). Results showed a significant effect of Context,  $F(2, 80) = 9.09$ ,  $p = .10$ ,  $\eta^2_p = .001$ . Pairwise comparisons showed that participants considered sadness as more useful for protection as compared to collaboration ( $d = .49$ ,  $SE = .12$ ,  $p = .001$ ) or openness to experience ( $d = .48$ ,  $SE = .12$ ,  $p = .001$ ). There were no differences between the perception of utility of sadness for protection and confrontation ( $d = .31$ ,  $SE = .12$ ,  $p = .06$ ). There was no significant interaction effect,  $F(6, 80) = 0.42$ ,  $p = .87$ ,  $\eta^2_p = .01$ .

For anger, the main effect of Group was not significant,  $F(2, 80) = 1.35, p = .27, \eta^2_p = .03$ . Next, the results showed a main effect of Context,  $F(3, 80) = 47.87, p = .001, \eta^2_p = .37$ , and a significant Context  $\times$  Group interaction,  $F(6, 80) = 3.87, p = .001, \eta^2_p = .09$ .

Pairwise comparisons showed that participants in general (i.e., across groups) perceived higher anger utility for protection as compared to confrontation ( $d = .97, SE = .18, p = .001$ ), collaboration ( $d = 1.86, SE = .21, p = .001$ ), and openness to experience ( $d = .97, SE = .18, p = .001$ ). Participants also perceived a higher anger utility for confrontation as compared to collaboration ( $d = .88, SE = .19, p = .001$ ) and openness to experience ( $d = .92, SE = .19, p = .001$ ). Concerning the interaction, pairwise comparisons showed that there were no differences between groups in perception of anger utility in the contexts of collaboration, openness to experience, and confrontation ( $ps > .79$ ). For the context of protection, sexual offenders reported a lower perceived utility of anger as compared to non-offenders ( $d = -1.64, SE = .49, p = .003$ ). There were no significant differences between sexual offenders and general offenders ( $d = -.89, SE = .49, p = .21$ ) and non-offenders and general offenders ( $d = .75, SE = .51, p = .43$ ).

For fear, there was only a main effect of Context,  $F(3, 80) = 8.44, p = .001, \eta^2_p = .10$ . Pairwise comparisons showed that participants reported a lower perception of fear utility in collaboration compared to protection ( $d = -.66, SE = .14, p = .001$ ) and confrontation ( $d = -.42, SE = .12, p = .007$ ), but not significantly different from openness ( $d = -.25, SE = .12, p = .18$ ). There were no differences in the perception of utility of fear in the contexts of protection, openness, and confrontation ( $ps > .69$ ). The effect of Group,  $F(2, 80) = 0.97, p = .91, \eta^2_p = .002$ , and the interaction,  $F(6, 80) = .72, p = .63, \eta^2_p = .02$ , were not significant.

For excitement, results showed a main effect of Context ( $F(3, 80) = 51.74, p = .001, \eta^2_p = .39$ ) and pairwise comparisons showed that participants reported a higher excitement utility for

openness as compared to confrontation ( $d = 1.68$ ,  $SE = .19$ ,  $p = .001$ ) and protection ( $d = 1.75$ ,  $SE = .19$ ,  $p = .001$ ). The same pattern was found in collaboration compared to confrontation ( $d = 1.39$ ,  $SE = .19$ ,  $p = .001$ ) and protection ( $d = 1.45$ ,  $SE = .19$ ,  $p = .001$ ). There were no differences between the perception of excitement utility for openness and collaboration ( $d = 1.68$ ,  $SE = .19$ ,  $p = .001$ ). The effect of Group ( $F(2, 80) = 3.47$ ,  $p = .06$ ,  $\eta^2_p = .08$ ) and the interaction effect were not significant ( $F(6, 80) = .88$ ,  $p = .51$ ,  $\eta^2_p = .02$ ). Overall, the significant context effects obtained for the perceived utility of emotions support the assumption that such perceived utility is likely to vary across different (here, goal-salient) situations and suggest that our measure was able to capture this variability.

### Discussion

To the best of our knowledge, the present investigation was the first to examine whether sexual offenders endorse different emotion goals as compared to general offenders and non-offenders. Findings from the present study were partly in line with our expectation that sexual offenders report greater levels of negative emotion goals. However, results revealed that differences may be specific to certain emotions, rather than representing a general tendency toward negatively-valenced emotions. Indeed, sexual offenders reported greater levels of the emotion goal of sadness, and lower levels of the emotion goal of excitement, compared to both general offenders and non-offenders participants. This pattern appears to indicate that, rather than favoring (or be less averse to) negative emotions *tout court*, sexual offenders may have a selective preference for feeling sadness, or alternatively, less aversion toward feelings of sadness. This finding is in line with similar emotion goals found among depressed participants (Millgram et al., 2015), suggesting that populations that experience emotion regulation difficulties may differ in their emotion goal for sadness. This finding was paired with lower

scores for the emotion goal of excitement, compared to both general offenders and non-offenders. Our exploratory analyses suggested that these emotion goals did not vary by context (i.e., collaboration, confrontation, openness, protection). Interestingly, however, a significant Context  $\times$  Group interaction revealed that sexual offenders wanted to experience less anger in the specific context of protection. Notably, across groups, ratings of emotion goals for anger were higher in the goal-salient context of protection, suggesting that this may be a context in which feeling anger is more desirable. Yet, this was less so for sexual offenders, suggesting that even when they feel threatened and in need of protecting themselves, they consider feeling anger as less desirable. Alternatively, it may be that their tendency to wanting to experience anger is insensitive to context.

To probe possible explanations of these differences in emotion goals, we first controlled for state and trait emotions, as it is plausible that people may show a greater preference (or a weaker aversion) for emotions that they tend to feel more often. Notably, state and trait levels of sadness and excitement could not fully account for the observed group differences in emotion goals. However, state and trait sadness did account partly for group differences in the emotion goal of sadness. Therefore, one possible explanation is that sexual offenders prefer to feel sad because it is a feeling that is familiar to them.

Other possible explanations for the differences in emotion goals were elucidated by examining differences in the perceived pleasantness and utility of emotions, representing hedonic and instrumental considerations underlying emotion goals, respectively (Tamir & Millgram, 2017). Sexual offenders reported lower perceived pleasantness for excitement and sadness, indicating that sexual offenders consider the experience of those emotions less enjoyable than general offenders (for both emotions) and non-offenders participants (for excitement

specifically) do. Therefore, it appears that a counterintuitive hedonic consideration may explain why sexual offenders want to feel less excited than others, because they may not derive as much pleasure from such feelings to endorse it an emotion goal. In contrast, it appears that sexual offenders consider sadness desirable *despite* it being a less pleasurable feeling for them, than it was for non-offenders. This counterintuitive pattern of findings may be better understood in light of the differences in beliefs about the utility of emotions described in the next paragraph.

Sexual offenders reported stronger beliefs in the utility of sadness compared to non-offenders. Taken together, these findings suggest that sexual offenders' lower levels of wanting to feel excited may be explained by hedonic (i.e., not gaining pleasure from the feeling of excitement) considerations. In contrast, instrumental considerations (i.e., considering sadness useful to pursue desired goals) may explain why sexual offenders want to feel sad. That is, they may consider sadness helpful and therefore set sadness as an emotion goal *even though* they do not derive pleasure from its experience.

As in the case of emotion goals, exploratory analyses across goal-salient contexts revealed that the perceived utility of excitement and sadness were not moderated by context, as indicated by non-significant interaction effects. However, as with emotion goals, sexual offenders also reported a specific, weaker perceived utility for anger in the context of protection. Thus, it may be that when they need to protect themselves, they do not endorse the goal to feel angry because they believe it would not be useful for them. There are other potential explanations that could be tested in future research. For instance, emotion goals may vary by the type of offense people commit, as a function of social stigma and other reactions associated with committing an offense (e.g., an individual who has committed a sexual offense may want to feel

sad as he thinks that is what he deserves). Hence, future research should explore what people want to feel before and during an offence.

The present findings may have important implications for the understanding of sexual offenders' emotional functioning. In turn, they may also offer novel insights for intervention programs for sexual offenders that include an emphasis on emotion regulation, that is, a criminogenic treatment target. Indeed, findings of the present study appear to indicate that sexual offenders may not only have difficulties in down-regulating negative emotions and maintaining positive emotions, but their emotion regulation efforts may be maladaptive also because of the emotion goals they pursue. In particular, if sexual offenders do not want to feel more excitement and rather want to feel more sadness, the repertoire of emotion regulation strategies that they may possess or may learn during treatment could be deployed to feel *worse* rather than *better*. This possibility is consistent with the neurobiological abnormalities in brain areas related to emotional experience described in etiological theories of sexual offenders (Mitchell & Beech, 2011), as well as with the cognitive distortions that characterize sexual offenders (Ward & Beech, 2016). Indeed, these cognitive distortions may also extend to the beliefs about the utility of emotions. The present findings may also be linked to other criminogenic treatment targets, such as the use of sex as coping (Cortoni & Marshall, 2001), at least to the extent, that sex may be used as a coping strategy when feeling sad (or vice versa, feeling sad may trigger sexual urges as a coping response). Taken together, if these findings would be replicated in future studies, they may suggest that intervention programs to improve sexual offenders' emotional functioning could benefit from working on the individual knowledge about (i.e., beliefs about the utility of emotions in general and across contexts) and perceived pleasure of (e.g., using experiential techniques) specific emotional experiences (Gillespie et al., 2012).

## Limitations

The present study has a number of limitations. First, our sample sizes were quite small and warrant further replication.<sup>7</sup> Relatedly, due to the sample size, we could not split the sexual offender sample to compare child offenders, adult offenders, and mixed sexual offenders (i.e., with both child and adult victims). Second, we only relied on self-report measures, and future studies should include alternative methods to test the robustness of our findings, including indirect measures of emotion goals, and physiological indices of emotional reactivity. In particular, it is worth noting that we only inquired about self-reported “goal-salient” contexts, and caution is needed to extend these findings to real-life contexts; hence, studies based on behavioral measures are needed. In addition, the internal consistency of some scales was relatively low. However, because low internal consistency attenuates correlation coefficients, this places our findings on a conservative side, rather than inflating the risk of overestimation. Third, our general offender sample consisted of formerly incarcerated offenders currently on probation, whereas the sexual offender sample was currently incarcerated. Therefore, generalization to broader offender populations would require further research, as context can play a role. In addition, it cannot be excluded that other between-sample differences (e.g., ethnicity, status of prisoners vs. probation) or even demand characteristics might have partly influenced the results. Finally, participants in the sexual offender group were older than non-offenders; however, it is important to note that despite this there were no differences when controlling for age.

## Conclusion

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<sup>7</sup> To address this concern, we conducted an analysis to estimate the required effect-size that we were able to detect given the power of our sample. With an  $\alpha = .05$ ,  $\beta = .80$ , a total sample size of 83 and 3 groups, the required effect-size is Cohen's  $f = .347$ , which equals  $\eta^2 = .029$ . As can be seen from table 2, the effect sizes associated with the significant differences in our study all exceeded this effect-size.



We provided a new angle on emotion regulation functioning of sexual offenders, and provided initial evidence that what may be dysfunctional in sexual offenders is also the *direction* of their emotion regulation efforts. In short, sexual offenders indicated that they want to feel sadness more than the other two groups, probably due to the belief that feeling sad can be useful for them, although they consider sadness less pleasurable than do the other two groups. In contrast, sexual offenders may not derive as much pleasure from experiencing excitement, and in turn report that they want to experience less excitement than non-sexual offenders.

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RUNNING HEAD: SEXUAL OFFENDERS' EMOTION GOALS

Table 1

*Educational level and annual income of participants in the three samples.*

	Sexual offenders (N = 31)	General offenders (N = 26)	Community participants (N = 26)
<i>Education</i>			
GCSE	8 (25.8%)	9 (34.6%)	9 (34.6%)
A level	2 (6.5%)	1 (3.8%)	5 (19.2%)
Diploma	3 (9.7%)	3 (11.5%)	4 (15.4%)
Degree	1 (3.2%)	0	0
Graduate degree	3 (9.7%)	0	2 (7.7%)
Vocational training	5 (16.1%)	10 (38.5%)	6 (23.1%)
No education	9 (29%)	2 (11.5%)	0
<i>Income (annual)</i>			
Less than 10.000 GBP	n.a.	26 (100%)	4 (15.4%)
10.001-20.000 GBP	n.a.	0	4 (15.4%)
20.001-30.000 GBP	n.a.	0	9 (34.6%)
30.001-40.000 GBP	n.a.	0	6 (23.1%)
40.001-50.000 GBP	n.a.	0	0
More than 50.001 GBP	n.a.	0	3 (11.5%)

*Note.* GCSE = General Certificate of Secondary Education.

Table 2

*Mean, standard deviation (SD) and group comparisons for general emotional preferences (emotion goals) and perceived pleasantness of emotions (attitudes toward emotions).*

	Sexual offenders (N = 31)	General offenders (N = 26)	Community participants (N = 26)	<i>F</i>	$\eta^2_{\text{partial}}$
<i>Emotion goals</i>					
Anger	.68(1.26)	.69(.96)	.46(.75)	.42	.01
Excitement	3.61(1.60) <sup>a</sup>	4.65(.96) <sup>b</sup>	4.71(1.27) <sup>b</sup>	6.37**	.14
Fear	1.10(1.78)	.92(1.19)	.33(.69)	2.52	.06
Sadness	1.19(1.74) <sup>a</sup>	.46(.90) <sup>b</sup>	.31(.58) <sup>b</sup>	4.36*	.09
<i>Attitudes toward emotions</i>					
Anger	1.68(.80)	1.62(.69)	1.75(.58)	.25	.01
Joy	4.03(.68) <sup>a</sup>	4.68(.56) <sup>b</sup>	4.48(.54) <sup>b</sup>	8.68***	.18
Fear	2.15(.81)	2.33(.80)	2.45(.88)	.94	.02
Sadness	2.08(.63) <sup>a</sup>	2.46(.60) <sup>b</sup>	2.29(.51) <sup>ab</sup>	3.12*	.07

*Note.* Means with different superscripts were significantly different ( $p < .05$ ) in post-hoc pairwise comparisons (reported only for significant univariate effects).