

# Self-regulation and emotional experience: Preliminary findings in non-sexual and sexual offenders

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## Abstract

*The functional role of self-regulation in sexually aggressive and other violent behavior is not yet fully understood and thus continues to be an important problem of research in the forensic field. In this study, the authors examined emotional self-regulation, conflict behavior, and personality disorders in a sample of 70 violent and non-violent offenders, among which 10 had committed sexual offences. Self report scales and interviews were applied. The differences in (self reported) self regulatory functions found between sexual and non-sexual offenders indicate a better mood management and less vulnerability to threatening and/or stressful situations for those who have not sexually offended.*

*Key words: Sexual offenders, self-regulation, emotional experience, personality disorders, forensic psychiatry and psychotherapy*

## Introduction

Self-regulation plays an important role in the phenomenology of human aggression and studying it is crucial for advancing our understanding of the development and the psychopathology of sexually aggressive and violent behavior (e.g. Posner & Rothbart, 2000; Febarro & Clum, 1998; Davidson, Putnam & Larson, 2000). In practical terms, understanding self-regulation and the mechanisms of self-regulatory behavior is expected to improve diagnosis, prevention and the treatment of aggressive and sexually deviant behavior. This is because no social behavior can theoretically be conceptualized without reference to the basic underlying mechanisms mediating between perceptual, cognitive and emotional processing of internal and external stimuli which eventually facilitate behavioral outcome. In the case of sexual offending, the concept of behavioral control plays an important role for the understanding of offence cycles and the possible ways of interrupting them, and it is assumed that the strength of behavioral control relates to the way a person perceives and both emotionally and cognitively processes sexual stimuli in the first place.

While it is evident that self-regulation is crucial both to the understanding of aggression and violence and to the refinement of therapeutic interventions aiming at the reduction of dangerousness in aggressive individuals (e.g. Andrews et al., 1990; Lösel, 1995; Lipsey, 1995; Hall, 1995; Hanson, Bloom & Stephenson, 2004), there are a number of improvements needed in self-regulation theory and research, notably: (1) the development of a tractable conceptual foundation and consistent terminology of self-regulation constructs, (2) the clarification of the structures and components of self-regulation, and especially (3) the clarification of the processes of self-regulation (Pintrich, 2000). All major approaches to self-regulation are affected by one or more of these aspects, be it biofunctional and dynamic, social cognitive and active, knowledge-driven, process-oriented, or cybernetic models. Based on the assumption that (conscious) self control entails (primarily unconscious) self-regulatory processes which depend on the interplay of different cognitive systems influenced by (positive or negative) affect in any given situation, this study addressed two

questions: (1) whether (self reported) self-regulation is related to sexual offending and (2) whether emotional experience differs in sexual and non-sexual offenders.

## Method

### Participants

The sample consisted of N = 70 adult male inmates recruited from two penitentiaries in South Germany (mean age=35.5; SD=10.0). 42 subjects had committed aggressive offences causing considerable harm to others (e.g. murder, homicide, manslaughter). 28 subjects were incarcerated for less severe non-violent offences (e.g. drug and property offences, fraud). 10 subjects had committed sexual offences (rape [n=3], sexual offences against minors [n=1], other sexual offences [n=6]). Participation was voluntary and according to the German laws on the protection of personal data. A remuneration of 20 € was paid to volunteers.

### Measures<sup>1</sup>

The *Volitional Components Questionnaire* (VCQ; Kuhl & Fuhrmann, 1998) is a comprehensive self-assessment tool mapping 38 functional components of self-regulation. The VCQ assesses two facilitatory modes: self-regulation and self-control, and two inhibitory modes: self-inhibition and volitional inhibition, capturing the efficiency to implement self-regulatory competencies in frustrating or threatening situations. Mechanisms associated with self-control are planning, impulse control, or initiative. Typical deficits in self-regulation are rumination, preoccupation, or alienation; typical deficits of volitional inhibition are lack of energy, listlessness, or reduced impulse control.

Addressing the first research question, eight sub-scales of the self-regulation scale were used: Self-determination (high scorers in this scale experience their actions as being guided by their own free will rather than other internal or external forces), goal directed attention control (a) [high scores indicate good ability to initiate concentration on (new) tasks] and (b) [high scores: subjects have good ability to maintain concentration on tasks and to shield themselves from distraction], positive self motivation (high scores: subjects are able to self-motivate in the face of difficult [aversive] situations), mood management (high scores: good ability to mobilize positive affect in stressful situations), arousal control under pressure (high scores: subjects are able to mobilize additional energy [or: to wake up] when faced with a difficult task or situation) self soothing under pressure (high scores: good ability to reduce stress or tension), and decision control (high scores: good ability to take decisions, and to stick to them later on).

The Emotional Experience Scales (Skalen zum Erleben von Emotionen [SEE]; Behr & Becker, 2004) measure the degree to which individuals perceive their emotions and how they evaluate or cope with them. The inventory has seven largely independent scales tapping an individuals capacity to accept one's own emotions (high scores indicate a positive attitude towards one's own feelings and emotions), emotional flooding in stressful situations (high scores: subjects tend to be overwhelmed by their own feelings and emotions), lack of emotions (high scores: subjects perceive little own emotions and they tend to be or to feel cut off from their own feelings), physical symbolization of emotions (in high scorers physical sensations are readily perceived and linked to mental processes. Meaning is given to somatic experience), the degree to which a person is able to (psychologically) symbolize emotions (to deal with [interpersonal] problems, high scorers tend to make use of fantasy and dreams), emotional regulation (high scores: good ability to regulate [positive and/or negative] affect and emotions), and emotional (self) control (high scorers indicate good emotional impulse control and tend to interact adaptively in social situations).

The test draws on the tradition of personality trait theories and the concept of emotional intelligence.

In order to control for personality and personality disorders, the SCID-II for DSM-IV Axis II disorders (questionnaire and interview; American Psychiatric Association, 1994; Wittchen et al., 1997) was applied. Following the suggestion of Ullrich, Borkenau, & Maneros (2001), it was decided to use dimensional rather than dichotomous scores for personality disorders.

## Results

Guided by our research questions, the groups were tested for differences in the self-regulation variables (VCQ) and the variables tapping emotional experience (SEE). Taking into account the largely differing sample sizes, non parametric statistical tests were applied, and effect sizes were estimated using a formula designed for two groups t-tests. Table 1 shows the results of these analyses.

	Non-sexual offenders (58≤n≤60)	Sexual offenders (n=10)		
Measure/variable	M (SD)	M (SD)	ES	p
<i>(VCQ) self-regulation scales</i>				
Self determination	9.02 (2.85)	8.00 (3.06)	0.35	.56
Goal directed attention (a)	10.40 (2.59)	9.50 (2.55)	0.35	.29
Goal directed attention (b)	9.98 (2.83)	9.00 (3.20)	0.34	.36
Positive self motivation	8.77 (2.55)	7.40 (2.84)	0.53	.15
<b>Mood management</b>	<b>9.03 (2.76)</b>	<b>6.70 (3.20)</b>	<b>0.83</b>	<b>.04</b>
Arousal control	8.73 (2.75)	8.90 (1.85)	-0.19	.77
<b>Self soothing</b>	<b>9.05 (3.04)</b>	<b>6.80 (3.20)</b>	<b>0.73</b>	<b>.03</b>
Decision control	10.38 (2.66)	9.20 (3.08)	0.43	.33
<i>(SEE) Emotional experience scales</i>				
Accepting own emotions	23.40 (4.16)	23.40 (4.55)	0.00	.92
Emotional flooding	18.43 (6.35)	20.40 (5.70)	-0.31	.39
Lack of emotions	12.00 (3.67)	11.50 (5.40)	0.13	.38
Somatic symbolization	25.33 (5.11)	27.40 (5.82)	-0.40	.18
Imaginative symbolization	14.78 (4.77)	16.80 (6.34)	-0.40	.51
<b>Emotional regulation</b>	<b>14.35 (2.84)</b>	<b>12.20 (3.12)</b>	<b>0.75</b>	<b>.03</b>
Self control	21.93 (4.19)	19.80 (4.05)	0.51	.16
Note:				
VCQ:				
<i>Self determination</i> : high scorers experience their actions as being guided by their own free will rather than other internal or external forces.				
<i>Goal directed attention (a)</i> : high scores indicate good ability to (initiate) and maintain concentration on (new) tasks.				

*Goal directed attention (b):* high scorers have good ability to maintain concentration on tasks and to shield themselves from distraction.

*Positive self motivation:* high scorers have the ability to self-motivate in the face of difficult (aversive) situations.

*Mood management:* high scores indicate good ability to mobilize positive affect in stressful situations.

*Arousal control:* high scorers are able to mobilize additional energy (or: to wake up ) when faced with a difficult task or situation.

*Self soothing (under pressure):* high scores indicate good ability to reduce stress or tension.

*Decision control:* high scores indicate good ability to take decisions, and to stick to them later on.

SEE:

*Accepting own emotions:* high scores indicate a positive attitude towards one's own feelings and emotions.

*Emotional flooding:* high scorers tend to be overwhelmed by their own feelings and emotions.

*Lack of emotions:* high scorers perceive little own emotions and they tend to be or feel cut off from their own feelings.

*Somatic symbolization of emotions:* in high scorers physical sensations are readily perceived and linked with mental processes. Meaning is given to somatic experience.

*Imaginative symbolization of emotions:* to deal with (interpersonal) problems, high scorers tend to make use of fantasy and dreams.

*Emotional regulation:* high scores indicate good ability to regulate (positive and/or negative) affect and emotions.

*Self control:* high scorers have good emotional impulse control and tend to interact adaptively in social situations.

Table 1: Mann Whitney U-Tests of measures on self-regulation and emotional experience (exact statistics); means (M), standard deviations (SD), and effect sizes (ES)

From the results in table one it appears that non sexual offenders show better ability than sexual offenders to self regulate their mood, to self-soothe when under pressure, and to generally regulate their emotions.

For personality disorders, there was a significant difference between the groups: sex offenders scored significantly higher on dependent personality disorders than other offenders (sex offenders [n=10], M =11.50; SD = 4.60; non-sexual offenders [n=58], M = 9.26; SD = 2.71. Mann-Whitney U-Test, exact statistics,  $p = .014$ ).

To test out the possibility of dependent personality features as a confounding variable of self-regulation, Spearman correlations were calculated for all self-regulation and emotional experience scales in both groups. The pattern of correlations was not uniform, ranging from  $r = -.12$  (accepting own emotions, ns) to  $r = +.47$  (imaginative symbolization of emotions,  $p \leq .001$ ) in the non-sexual offender group, and from  $r = -.88$  (goal directed attention [b],  $p \leq .001$ ) to  $r = +.77$  (emotional flooding,  $p < .01$ ) in the sex offender group. If dependent personality features were to be accepted as a principle factor responsible for the differences between the groups, one would expect a lot of highly significant correlations between the sex offender group and dependent personality; and low (non-significant) correlations between the non-sexual offenders and dependent personality. This was not the case (there were six significant correlations with self regulation and emotional experience in the sex offender group, and four in the non-sexual offender group).

## Discussion

Although most group comparisons in the self regulation and emotional experience scales were not statistically significant, it is noteworthy that effect sizes were generally quite high, and unidirectional, with sex offenders scoring lower on most self-regulation variables and higher on emotional experience scales pertaining to the symbolization of emotions.

If effect sizes are taken into account, the sex offender group appears to differ from non-sexual offenders in various aspects of self-regulation and emotional experience. The differences in conscious self regulatory functions found between the two groups indicate rather high emotional vulnerability to threatening and/or stressful situations in sexual offenders. Their lower scores on mood management and self-soothing suggest that sex offenders might have more difficulty than other offenders to adaptively regulate their mood in stressful situations, and to apply adequate self soothing strategies.

The sex offender group also reported lower emotional self-regulation than non-sex offenders. Low scores on this scale indicate difficulty to self soothe and/or to mobilize positive affect. This finding supports the results reported on the VCQ scales.

Furthermore, the sex offender group scored significantly higher on dependent personality features. Although the sample size is small and results should thus be interpreted with caution, this finding aligns with results of studies focusing on empathy deficits and intimacy problems in sexual offenders (Marshall et al., 1997; Hudson & Ward, 2000; Marshall, Hamilton & Fernandez, 2001; Cohen et al., 2002), or evidence pertaining to personality features of sexual offenders, such as low self confidence (Marshall et.al., 1997) and dependency needs, anxiety, and helplessness (Bridges, Wilson, & Gacono, 1998). In this study, however, it is unlikely that dependent personality features alone account for the differences in self-regulation variables.

A preliminary interpretation of the findings on self-regulation, emotional experience, and personality disorders might be as follows: when faced with conflict situations, sexual offenders tend to activate specific interpersonal (coping) strategies all of which relate to amicability, servility, or subjection.

These strategies are associated with deficits in (emotional) self-regulation and the ability to self-soothe under pressure, and/or to regulate mood.

Methodological limitations lie primarily in the small number of subjects who have sexually offended. The results presented in this paper are tentative in that group sizes do not allow for testing specific hypotheses, and conclusions should be drawn with caution. The rationale to carry out this study was explorative and heuristic; it was based on the fact that the measures on self-regulatory functions have never been assessed with the methods introduced in this paper. Since the study was aimed to generate rather to confirm or disconfirm hypotheses, no correction of type one error was applied and effect sizes were calculated instead; effects are less dependent on group sizes than significance tests and in practical terms they help estimate whether there might occur statistically significant differences if N was substantially increased. In this study, most effect sizes were medium ( $d \geq \pm .40$ ) and some of them were even high ( $d > .70$ ).

In summary, it was shown that fine-grained self regulatory variables might not be irrelevant to the study of sexual vs. non-sexual offending. Further research is needed to replicate these findings, and to examine the role of particular variables (for example success and failure related self motivation, mood management, attention control), especially in relation to their significance for therapeutic interventions on sexual offenders.

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## Endnote

<sup>1</sup> All measures in this section have been tested on their psychometric properties (internal consistency, test-retest reliability, inter-rater reliability where applicable, and several validity measures). Details can be found in the cited references.

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