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### Alexithymia in Non-Violent Offenders

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### Abstract

**Background:** Alexithymia is a trait involving difficulties processing emotions. Existing data suggest it is associated with violent offending. Violent offender programmes, therefore, screen violent offenders for alexithymia and attend to it if necessary. No studies have, however, examined alexithymia levels in *non-violent* offenders and it is therefore unknown whether it is also a criminogenic factor in this population.

**Aims:** To investigate alexithymia levels of incarcerated non-violent offenders and compare them with a community comparison group.

**Method:** We used the 20-item Toronto Alexithymia Scale to compare the alexithymia levels of 67 incarcerated non-violent offenders with a community comparison group of 139 people.

**Results:** Alexithymia levels did not differ between the groups.

**Conclusion:** It appears that alexithymia is not a criminogenic factor for non-violent offenders and screening of such offenders appears unnecessary.

Key words: *alexithymia; emotion processing; non-violent offending; non-violent crime*

### **Alexithymia in Non-Violent Offenders**

Alexithymia is a multidimensional trait, comprised of a cluster of emotion processing deficits: difficulty identifying one's own feelings (DIF), difficulty describing feelings (DDF), and an externally orientated thinking style (EOT), whereby people tend to not focus attention on their emotions (Preece et al., 2020a). These deficits relate to poorly developed emotion schemas (Lane & Schwartz, 1987) and/or frequent use of experiential avoidance as an emotion regulation strategy (Preece et al., 2017). Alexithymia is normally distributed in the general population and is of interest to clinical psychology and psychiatry because a high level of alexithymia is an established risk factor for a range of psychopathologies and reduces the effectiveness of some psychotherapeutic approaches (Taylor et al., 1999).

Alexithymia may be a criminogenic factor for offenders because it is associated with poor social problem-solving (Christopher & McCurran, 2009), impulsivity (Shishido et al., 2013), aggression (Velotti et al., 2016), and destructive externalising behaviours (e.g., 'acting out'; Taylor et al., 1992). Alexithymia is also associated with poor emotion regulation abilities (Preece et al., 2017; Robertson et al., 2014). People who have difficulty understanding or expressing their emotions are more likely to respond to others in an antisocial manner, especially by responding violently (see Eckhardt, Jamison, & Watts, 2002). Researchers have therefore primarily studied violent offending (see Leshem et al., 2019 for a review). They have consistently found the alexithymia levels of violent offenders to be elevated compared to those of non-offenders (see Gillespie et al., 2018; Garofalo et al., 2017; Strickland et al., 2017). Leshem et al. (2019) therefore recommended that alexithymia should be assessed and considered in rehabilitation programmes for violent offenders, and Day (2009) have suggested treating alexithymia as a responsivity factor, pointing out that, if not ameliorated, alexithymia could prevent offenders engaging effectively in rehabilitation programmes.

Researchers have to date focussed on violent offenders or mixed groups that included both violent and non-violent offenders. Christopher and McCurran's (2009) sample for instance included property, dangerous driving, drug, and violent offenders. It thus remains unclear whether alexithymia might be a criminogenic and responsivity factor for non-violent offenders, making it necessary to screen them for alexithymia and develop programs to address any deficits they might have in this regard. The question we investigated is therefore whether there is a difference between the alexithymia levels of incarcerated non-violent offenders and community members.

### **Method**

This study formed part of a more comprehensive research project investigating alexithymia in incarcerated male violent and non-violent offenders. The ethics committees of Edith Cowan University and the Department of Justice (Department) approved this study, but required that the Department identify and communicate with the potential participants (in the offender group) on behalf of the researchers.

### **Participants and Procedure**

The main inclusion criterion for the offender group was conviction for non-violent (mostly property) crimes and the exclusion criterion any prior convictions for violent or sexual crimes, all according to police records. The Department identified potential participants (violent and non-violent offenders) who were at the time serving sentences in six Western Australia prisons at the time of the study. The Department sent out information documents and consent forms to 1687 potential male participants (both violent and non-violent) and provided a list of those who agreed to participate to the researchers. Most participants completed the TAS-20 (English version) in the presence of the first author at their prison visitor's centre, but those in regional prisons received and returned it by post.

Alexithymia was measured using the 20-item Toronto Alexithymia Scale (TAS-20; Bagby et al., 1994), a self-report instrument designed to provide separate DIF, DDF, and EOT subscale scores as well as a total scale score, as an overall marker of alexithymia. It is the most used alexithymia scale for research with offenders. Higher scores indicate higher levels of alexithymia. A total score of  $\geq 61$  is sometimes used to categorise people as alexithymic or high in alexithymia, but alexithymia is best treated as a continuous variable (Parker et al., 2008); we analysed it as a continuous variable in our study. The TAS-20 has good psychometric properties, except for the EOT subscale (e.g., Preece et al., 2018a; Groth-Marnat, 2009), which was confirmed in our study here (EOT subscale  $\alpha=0.61$ ); all other TAS-20 scores had  $\alpha \geq 0.70$ ).

Prisoners who agreed to participate either completed the TAS-20 at their prison visitor centre or returned it by post. Some ( $n=5$ ) prisoner-participants failed to complete a small number of TAS-20 items (i.e., 1 or 2 items), so we replaced these missing data using the estimation maximisation method.

Our male general community group was recruited by an online survey recruiting company (Qualtrics panels), who attempted to obtain a sample representative of the general community in Australia. They completed the TAS-20 as part of an anonymous online survey. There were no missing data for this group.

### **Analysis plan**

A series of independent samples *t*-tests were used to compare the prisoner and general community samples in terms of TAS-20 scores. *A priori* power analysis using G\*power indicated at least 64 participants would be needed in each group (for Cohen's  $d = 0.5$ ,  $\alpha = 0.05$ , power = 0.80, two-tailed).

## Results

The Department did not provide a classification (violent versus non-violent) of the 1687 prisoners whom they invited to the study, but only 146 of them eventually returned useable TAS-20 questionnaires giving a response rate of 8.7%. Of these, our offender sample consisted of the 67 non-violent offenders that returned a completed TAS-20, and our general community sample consisted of 139 participants. On average, the offender sample was significantly younger (39.64 years, *SD* 12.94) than the general population group (53.74 years, *SD* 14.88;  $p < .001$ ). Around one quarter ( $n = 37$ , 26.7%) of the general population men had completed a university degree, but education data were not available for the offender group.

There was no significant difference between the groups for the TAS-20 total scale score ( $t[204] = -0.147$ ,  $p = 0.883$ ), the DIF subscale score ( $t[204] = -1.394$ ,  $p = 0.165$ ), or the DDF subscale score ( $t[204] = -0.298$ ,  $p = 0.766$ ) (see also table 1). Further, neither group had average scores within the alexithymic range (average total scale scores were  $\leq 51$ ; Parker et al., 2003). Differences in EOT subscale scores were not assessed due to the low reliability of that subscale. To maximise our sample size, we did not use age as a covariate in these analyses because age data were unavailable for some of the offender group ( $n = 11$ ).

## Discussion

Our finding of no difference in alexithymia ratings between non-violent offenders and community residents contrasts with research with violent offenders (Gillespie et al., 2018; Garofalo et al., 2017; Strickland et al., 2017). Thus, although alexithymia could be a criminogenic factor for impulsive or emotionally driven violent offenders (Strickland et al., 2017), it seems not to hold that possibility for non-violent offenders, at least in our data. Our findings suggest no reason to screen for alexithymia among non-violent offenders before rehabilitation efforts.



This finding should, however, be treated cautiously and replicated because of the limitations of the study. We relied on a small number of offenders in one Australian state, who may have been convicted of sexual or violent offences in another jurisdiction. It is worth noting, however, that even with the possible inclusion of violent offenders (whose scores are generally higher than those of non-offenders, see Gillespie et al., 2018; Garofalo et al., 2017; Strickland et al., 2017) the alexithymia scores of our offender group were not significantly different from those of the community group. We can also not conclusively exclude the possibility that there were offenders in our community group, although it seems unlikely, as their data were entirely self-reported. Another limitation that our study shares with other TAS-20 research is the low reliability of its EOT subscale; future research might benefit from using the recently introduced Perth Alexithymia Questionnaire (Preece et al., 2018b, 2020b), with better psychometric properties. Potentially more serious limitations are that our offender and community groups were not comparable in age, and socio-economic status (SES) data were unavailable for the offender group. Previous studies have found age and SES to only be weakly or inconsistently related to alexithymia (when relationships are present, the direction is usually that alexithymia levels are higher in younger and low SES populations; e.g., Lane et al., 1998), but nonetheless, future researchers should endeavour to match comparison groups on these variables and also examine women and young people. Finally, it is important to acknowledge that we are dealing with groups, and it remains possible that individuals within such groups could benefit from help with alexithymia.

### References

- Bagby, R. M., Parker, J. D., & Taylor, G. J. (1994). The twenty-item Toronto Alexithymia Scale—I. Item selection and cross-validation of the factor structure. *Journal of Psychosomatic Research, 38*, 23-32.
- Christopher, G., & McMurrin, M. (2009). Alexithymia, empathic concern, goal management, and social problem solving in adult male prisoners. *Psychology, Crime & Law, 15*(8), 697-709.
- Day, A. (2009). Offender emotion and self-regulation: implications for offender rehabilitation programming. *Psychology, Crime & Law, 15*, 119-130.
- Eckhardt, C., Jamison, T. R., & Watts, K. (2002). Anger experience and expression among male dating violence perpetrators during anger arousal. *Journal of Interpersonal Violence, 17*, 1102-1114.
- Garofalo, C., Velotti, P., & Zavattini, G. C. (2018). Emotion regulation and aggression: The incremental contribution of alexithymia, impulsivity, and emotion dysregulation facets. *Psychology of Violence, 8*, 470-483.
- Gillespie, S. M., Garofalo, C., & Velotti, P. (2018). Emotion regulation, mindfulness, and alexithymia: Specific or general impairments in sexual, violent, and homicide offenders? *Journal of Criminal Justice, 58*, 56-66.
- Groth-Marnat, G. (2009). *Handbook of psychological assessment*. John Wiley & Sons.
- Lane, R. D., & Schwartz, G. E. (1987). Levels of emotional awareness: A cognitive-developmental theory and its application to psychopathology. *The American Journal of Psychiatry, 144*, 133-143.

- Lane, R. D., Sechrest, L., & Riedel, R. (1998). Sociodemographic correlates of alexithymia. *Comprehensive Psychiatry*, *39*, 377-385.
- Leshem, R., van Lieshout, P. H., Ben-David, S., & Ben-David, B. M. (2019). Does emotion matter? The role of alexithymia in violent recidivism: A systematic literature review. *Criminal Behaviour and Mental Health*, *29*, 94-110.
- Parker, J. D. A., Taylor, G. J., & Bagby, R. M. (2003). The 20-item Toronto Alexithymia Scale III. Reliability and factorial validity in a community population. *Journal of Psychosomatic Research*, *55*, 269-275.
- Parker, J. D., Keefer, K. V., Taylor, G. J., & Bagby, R. M. (2008). Latent structure of the alexithymia construct: a taxometric investigation. *Psychological Assessment*, *20*, 385-396.
- Preece, D., Becerra, R., Allan, A., Robinson, K., & Dandy, J. (2017). Establishing the theoretical components of alexithymia via factor analysis: Introduction and validation of the attention-appraisal model of alexithymia. *Personality and Individual Differences*, *119*, 341-352.
- Preece, D., Becerra, R., Robinson, K., & Dandy, J. (2018a). Assessing alexithymia: Psychometric properties and factorial invariance of the 20-Item Toronto alexithymia scale in nonclinical and psychiatric samples. *Journal of Psychopathology and Behavioral Assessment*, *40*, 276-287.
- Preece, D., Becerra, R., Robinson, K., Dandy, J., & Allan, A. (2018b). The psychometric assessment of alexithymia: Development and validation of the Perth Alexithymia Questionnaire. *Personality and Individual Differences*, *132*, 32-44.

- Preece, D. A., Becerra, R., Robinson, K., Allan, A., Boyes, M., Chen, W., Hasking, P. & Gross, J. J. (2020a). What is Alexithymia? Using Factor Analysis to Establish its Latent Structure and Relationship with Fantasizing and Emotional Reactivity. *Journal of Personality*, 1-15.
- Preece, D. A., Becerra, R., Allan, A., Robinson, K., Chen, W., Hasking, P., & Gross, J. J. (2020b). Assessing alexithymia: Psychometric properties of the Perth Alexithymia Questionnaire and 20-item Toronto Alexithymia Scale in United States adults. *Personality and Individual Differences*, 166, 1-8.
- Roberton, T., Daffern, M., & Bucks, R. S. (2014). Maladaptive emotion regulation and aggression in adult offenders. *Psychology, Crime & Law*, 20, 933-954.
- Strickland, J., Parry, C. L., Allan, M. M., & Allan, A. (2017). Alexithymia among perpetrators of violent offences in Australia: Implications for rehabilitation. *Australian Psychologist*, 52, 230-237.
- Taylor, G. J., Bagby, R. M., & Parker, J. D. (1999). *Disorders of affect regulation: Alexithymia in medical and psychiatric illness*. Cambridge University Press.
- Velotti, P., Garofalo, C., Petrocchi, C., Cavallo, F., Popolo, R., & Dimaggio, G. (2016). Alexithymia, emotion dysregulation, impulsivity and aggression: A multiple mediation model. *Psychiatry Research*, 237, 296-303.

Table 1

*Descriptive Statistics for the TAS-20 in Non-Violent Offender and Community Samples*

TAS-20 scores	Non-violent offenders ( <i>N</i> = 67)		Community ( <i>N</i> = 139)	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Total Scale	49.95	14.79	49.66	12.65
DIF	16.10	7.36	14.71	6.40
DDF	14.03	5.46	13.81	4.98
EOT	19.82	5.13	21.15	3.81

*Note.* Possible score ranges on the DIF (difficulty identifying feelings), DDF (difficulty describing feelings), and EOT (externally orientated thinking) subscales range from 7 to 35, 5 to 25, and 8 to 40, respectively, and the total score can range from 20 to 100.