



# Kent Academic Repository

Wood, Jane L. and Newton, A.K. (2003) *The role of personality and blame attribution in prisoners' experience of anger. Personality and Individual Differences*, 34 (8). pp. 1453-1465. ISSN 0191-8869.

## Downloaded from

<https://kar.kent.ac.uk/26033/> The University of Kent's Academic Repository KAR

## The version of record is available from

[https://doi.org/10.1016/S0191-8869\(02\)00127-7](https://doi.org/10.1016/S0191-8869(02)00127-7)

## This document version

UNSPECIFIED

## DOI for this version

## Licence for this version

UNSPECIFIED

## Additional information

## Versions of research works

### Versions of Record

If this version is the version of record, it is the same as the published version available on the publisher's web site. Cite as the published version.

### Author Accepted Manuscripts

If this document is identified as the Author Accepted Manuscript it is the version after peer review but before type setting, copy editing or publisher branding. Cite as Surname, Initial. (Year) 'Title of article'. To be published in *Title of Journal*, Volume and issue numbers [peer-reviewed accepted version]. Available at: DOI or URL (Accessed: date).

### Enquiries

If you have questions about this document contact [ResearchSupport@kent.ac.uk](mailto:ResearchSupport@kent.ac.uk). Please include the URL of the record in KAR. If you believe that your, or a third party's rights have been compromised through this document please see our [Take Down policy](https://www.kent.ac.uk/guides/kar-the-kent-academic-repository#policies) (available from <https://www.kent.ac.uk/guides/kar-the-kent-academic-repository#policies>).

The role of personality and blame attribution in prisoners' experiences of anger

Jane Wood  
Department of Psychology,  
Keynes College,  
University of Kent at Canterbury,  
Canterbury,  
CT2 7NP,  
United Kingdom.

And  
Anna Kristín Newton  
The Prison and Probation Administration  
Litla-Hraun  
Borgartún 7  
Reykjavík  
Iceland  
Fax: 00 354 5205001

E-mail: [J.L.Wood@ukc.ac.uk](mailto:J.L.Wood@ukc.ac.uk) and [annan@tmd.is](mailto:annan@tmd.is)

Any correspondence, requests for reprints or proofs should be directed to the first author.

Running Head: Prisoners' Anger

## Abstract

The emotion of anger has gained researchers' interest in recent years (Novaco, 1994, 1997). However, it is still unclear what influences the expression of anger. The current study investigated the relationship between anger, personality and blame attribution in Icelandic prisoners. Sixty-nine male offenders completed the Gudjonsson Blame Attribution Inventory, the Eysenck Personality Questionnaire and the Novaco Anger Scale. No differences were found in the anger levels of violent/non-violent offenders. Results indicated that recidivism, psychoticism and neuroticism were predictive of anger levels, but no relationship was found between blame attribution and anger. The findings of this study suggest that in terms of anger management programmes in prison, it might be advantageous to target repeat offenders and take into account personality factors that seem to influence anger.

Keywords: Prisoners, anger, blame attribution, personality, treatment programmes

The examination of anger is a growing area of research (Towl & Crighton, 1996; Novaco, 1997, 1998); consequently the identification of factors that facilitate it is in its early stages. It has been suggested that variables such as personality and blame attribution may influence the experience of anger and possibly the implementations of anger management programmes (McFatter, 1998; Quigley & Tedeschi, 1996). In order to identify prisoners most in need of anger management programmes, the aim of the current study was to explore the relationship between anger, personality and blame attribution in prisoners held in the Icelandic prison system where, to date, no group work has been introduced.

Anger can be defined as a response to an aversive state consisting of both cognitive and physiological components (Novaco, 1997). It is a normal and often functional response to negative situations, protecting self-esteem, instigating action, energising and defending individuals against psychological or physical harm (Towl & Crighton, 1996). Alternatively, anger can be destructive, physically and mentally harmful and can lead to the onset of various problems such as depression and cardiovascular complications (Stein, Trabasso & Liwag, 1993; Novaco, 1994).

Novaco's (1978) model of anger suggests the emotional expression of anger is an interaction between external events, cognitive arousal and behavioural factors. Novaco's (1978) theory indicates that it is individual interpretations of aversive situations through personal scripts and schemas that mediate the transformation of information into behavioural actions. In particular, if a situation is perceived as negative or threatening to

the individual's self-image then it becomes likely that anger will result (Novaco, 1978, 1997).

Anger only becomes problematic when its expression becomes a frequent, inappropriate and/or disproportionate reaction to events (McDougall, Venables & Roger, 1991; Towl and Crighton, 1996; Novaco & Chemtob, 1998). It has been proposed that aggression is often a consequence of anger arousal (Cooke, Baldwin & Howison, 1990) and many studies indicate anger as a significant predictor of aggression (Buss & Perry, 1992; Novaco, 1997; 1998). Both anger (Baron & Hartnagel, 1997) and aggression (Eysenck & Gudjonsson, 1989) have been shown to predict offending behaviour.

Although anger may not always lead to aggressive behaviour, studies on populations with high anger levels show that aggressive behaviour is a frequent outcome of anger arousal (Chemtob, Novaco, Hamada, & Gross, 1997) and elevated anger levels, coupled with aggressive behaviour, are often observed in forensic patients, offenders and post-traumatic stress syndrome patients (Chemtob, et al, 1997; Watt & Howells, 1999). As anger can predict aggression, which in turn, may result in offending behaviour, anger management programmes have been introduced in prisons throughout Europe and the USA (Hollenhurst, 1998). The objective of these programmes is not to eradicate anger, but rather to regulate it by challenging maladaptive and irrational beliefs relating to the function and nature of anger (Howells, Watt, Hall & Baldwin, 1997). Other aims include a heightened awareness of the negative outcomes that anger can have and the development of the ability to regulate anger experiences (HM Prison Service, 1995). The underlying principle of anger management programmes is that if offenders learn how to control their anger, this may lead to a reduction in aggressive behaviour (Dowden,

Blanchette & Serin, 1999) and consequently a reduction in further offending (Feindler & Ecton, 1986).

Obviously not all offenders have problems controlling their anger (Howells, 1993). Deciding which offenders would benefit from anger control programmes may logically lead to the selection of offenders incarcerated for violent rather than non-violent crimes. Hence, research indicates that most anger control programmes in prisons focus on violent offenders (Dowden et al., 1999). Although selecting participants for anger management programmes on the basis of violent or non-violent crimes seems rational, to date there is little research suggesting that violent and non-violent offenders differ in terms of anger and/or levels of aggression. Accordingly, there is no real evidence suggesting that only offenders with histories of violence are in need of anger management.

Indeed, it could be argued that other groups of offenders would benefit from inclusion in Anger Management programmes. Research notes how people will differ in their reaction to the emotional experience of anger (e.g. Averill, 1980) and so it seems feasible that offences other than those involving violence may also result from feelings of anger; a possibility that seems to be neglected by much of the literature. However, if those in need of anger management cannot be identified solely on history of violence, then alternative forms of identification must be considered.

Some research has noted how younger offenders more frequently display aggressive behaviour as a result of anger than do older offenders (Dangel, Deschner & Rasp, 1989) and age has been considered to be a mediating factor in the expression of anger as aggressive behaviour (Dowden et al., 1999). Consequently, it is possible that

younger offenders are in greater need of anger management programmes than are older offenders. Similarly, personality factors are thought to play some part in the individual differences noted in intensity, expression and duration of emotions (McFatter, 1998) and yet the role personality factors play in the experience and expression of anger seem to have been largely neglected. This is surprising when research indicates that personality traits are relatively stable characteristics that can guide (Hall, Lindzey & Campbell, 1998) and explain (Pervin 1993) behaviour.

Although the relationship between anger and personality has been neglected, a considerable amount of research has been conducted on personality factors and crime (Eysenck, 1987; Eysenck & Gudjonsson, 1989; Kruger, Schmutte, Caspi, Moffitt, Campbell & Silva, 1994). However, results so far have been inconclusive. For instance, some research indicates that offenders score higher on psychoticism (P), extraversion (E) and neuroticism (N) than non-offenders (Eysenck 1977), whereas other studies note different relationships between personality and crime (Eysenck, 1987; 1996). One reason for this ambiguity is thought to be due to the heterogeneity of offenders (Howells et al., 1997) which makes it unlikely that personality factors will be of any real use in predicting offending behaviour overall. However, personality variables may be more useful in predicting specific variables associated with offending behaviour, for example anger levels.

Although Eysenck's (1977) theory of personality makes no direct reference to anger and its ties to personality or criminality, aggression is considered to be a trait on the psychoticism factor (Eysenck, 1977; Eysenck & Gudjonsson, 1989). It might then be expected that anger too will relate to psychoticism. Similarly, Eysenck does not directly

refer to the relationship between neuroticism and anger, but depression, irrationality and anxiety, all traits associated with neuroticism, have also been linked to anger (Lemerise & Dodge 1993). As a result, it is possible that personality factors may help identify prisoners in need of anger management.

A further factor that might play a role in anger arousal is blame attribution (Feindler & Ecton, 1986). According to Heider's (1958) theory of attribution, people have a tendency to attribute their own and others' behaviour either to personal dispositions (internal properties) (Loza & Clements, 1991; Gudjonsson & Petursson, 1991) or to social and environmental factors (external forces) surrounding a given act (Fazio, Kroner & Forth, 1997). The antecedents of blame and anger are considered to be similar, with both including attributions about intent, controllability and justification of an act (Rule & Ferguson, 1984; Weiner, 1995). Quigley and Tedeschi (1996) found that anger and blame attribution have a bi-directional effect on each other. As anger may result from circumstances where people feel that they have been unjustly provoked or violated (Martin & Wan, 1999) it seems likely that angry individuals may believe someone else is responsible for a negative event.

The Gudjonsson Blame Attribution Inventory (BAI) (Gudjonsson & Singh, 1989) assesses three domains of blame attribution: external, mental element and guilt. External attribution on the BAI follows Heider's (1958) theory of attribution to external factors. The external dimension of the BAI includes statements such as "I did not deserve to get caught for this act" and "I should not blame myself for the act". Mental element is designed to measure the degree to which a person attributes the blame of their action to personal internal factors such as mental illness or perceived loss of control, for instance,



“I had no control over my actions” and “I was very depressed when I committed the act”. Guilt attribution on the BAI is a measurement of remorse regarding criminal behaviour, and includes assertions such as, “I feel a constant need to punish myself” and “I will never be able to forgive myself for what I have done”.

Studies using the BAI with offender populations reveal that different types of offenders tend to use different attribution styles to explain their criminal behaviour (Gudjonsson & Petursson, 1991; Gudjonsson & Bownes, 1992). For instance, Gudjonsson and Bownes (1992) note how sex offenders have higher levels of guilt and lower external attribution on the BAI. In addition, Gudjonsson and Petursson’s (1991) study on Icelandic offenders found that violent offenders had higher scores on the external and mental element attribution of the BAI than other offenders, a result which supported Gudjonsson and Singh’s (1989) earlier study of British offenders. Blame attribution has also been linked to personality traits associated with criminality (Shine, 1997) and a positive correlation between external blame attribution and psychoticism has been identified (Shine, 1997; Gudjonsson, 1999; Peersen, Gudjonsson & Sigurdsson, 2000). It is therefore feasible that both blame attribution and personality factors may play a part in the manifestation and expression of anger.

Clearly, the issues surrounding anger, blame attribution and personality need further clarification. Consequently, it was the aim of the current study to examine the role of personality variables and blame attribution in the experience of anger among Icelandic prisoners.

It was predicted that:

1. Violent offenders would have higher anger scores than non-violent offenders.
2. Younger offenders would report higher levels of anger than older offenders.
3. Violent offenders would score higher on measures of neuroticism and psychoticism than non-violent offenders
4. Violent offenders would attribute blame to external sources and mental elements more than non-violent offenders.

## Method

### Participants

All participants were male offenders incarcerated in Icelandic prisons. Of the 91 offenders approached 66 (73 %) agreed to participate. Participants' ages ranged from 18-66 with a mean of 31.4 years. Thirty-three (50%) offenders had been convicted of violent crimes (e.g. murder, attempted murder, grievous bodily harm and robbery ) and the remaining 33 (50%) had been convicted of non-violent crimes, for instance drug smuggling, fraud and traffic offences. Thirty seven of the participants were recidivists (58%) whilst 29 (42%) were first time prisoners. Due to possible differences in blame attribution according to crime committed (e.g. Gudjonsson & Bownes 1992) sex offenders were not included in the current study.

### Materials

Standardised questionnaires were used and each was tested for reliability using Cronbach's Alpha coefficient. The scales included the Novaco Anger Scale (Novaco, 1994), reliability = .95; and the Gudjonsson Blame Attribution Inventory (Gudjonsson & Singh, 1989a), reliability = .80 As Eysenck's Personality Questionnaire (Eysenck & Eysenck 1975; Haraldsson & Bjornsson, 1985), consisted of 4 subscales, each was tested separately for reliability: the extraversion items had a reliability of .79; the neuroticism items had a reliability of .84; the psychoticism items had a reliability of .61 and the lie scale had a reliability of .77.

All three questionnaires rely on self-report and were translated into Icelandic. In addition to the three questionnaires, questions were asked regarding type of crime, length of sentence and previous sentence history.

### Procedure

The study was conducted in four of the five prisons in Iceland. The fifth prison was closed over the course of the study and the prisoners transferred to one of the other four prisons. This allowed the researcher to contact all prisoners in Iceland.

Before the study began, prisoners were sent a letter outlining the nature of the research. When the researcher arrived at the prison each prisoner was asked if they would be willing to take part. Before completing the questionnaires, participants were fully informed of the confidential nature of the study and their rights to withdraw at any time. Each participant then completed the questionnaires in the presence of the researcher, who assisted with any reading difficulties. Following completion of the questionnaires, participants were given the opportunity to ask questions regarding the project. Each session lasted about one hour.

## Results

Exploratory analyses revealed the data was normally distributed and thus suitable for parametric analyses.

### Violent and non-violent offenders

The hypotheses for this study anticipated that violent offenders would experience higher levels of anger arousal than non-violent offenders; violent offenders would have higher levels of psychoticism and neuroticism than non-violent offenders; violent offenders would externalise blame more than non-violent offenders and violent offenders would score higher than non-violent offenders on the mental element of the BAI.

To test each of these hypotheses a Multivariate ANOVA (MANOVA) was used to compare violent and non-violent offenders on each element of the 3 scales. The F values, significance levels and descriptive statistics can be found in Table 1.

---

INSERT TABLE 1 ABOUT HERE

---

As Table 1 shows, differences were found between violent and non-violent offenders in terms of blame attribution. Violent offenders reported higher levels of guilt and mental element of blame attribution than did non-violent offenders. Similarly violent offenders showed higher levels of psychoticism than did non-violent offenders. However, importantly for the purposes of the current study, no differences were found between violent and non-violent offenders in anger levels.

#### Age

To test the hypothesis that younger offenders would report higher levels of anger than older offenders, a median split was carried out on age and a 2(age) by 2 (type of offence) ANOVA examined the effects of age and offence type (violent or non-violent) on anger levels. No significant main effects were found for age,  $F(1,62) = .17, p = .68$ , type of offence,  $F(1, 62) = 2.19, p = .15$ , or interaction effect,  $F(1, 60) = 0.12, p = .73$ .

#### Blame attribution and anger levels

The hypothesis that offenders with higher anger scores would be more likely to attribute their anger to external sources than offenders with lower anger scores was tested using a correlation. No relationship was found between anger and external blame attribution,  $r = .06, p = 0.63$ .

#### Predictors of anger arousal

As the results above indicate that prisoners convicted of violent crimes do not experience higher levels of anger than prisoners convicted of non-violent crimes, it seems likely that factors other than type of crime could be better indicators of prisoners' anger arousal.

To explore this possibility, a stepwise regression analysis was carried out to identify an optimal set of predictors of anger. Both demographic (e.g. sentence length, time spent in current prison) and psychological variables (personality and blame attribution) were entered into the analysis at the same time. Results identified only 4 variables; recidivism, lie scale, psychoticism and neuroticism as predictors of anger levels and together explaining 56% of the variance. As recidivism can be considered to be conceptually distinct from the other 3 variables as it is a demographic and not a psychological variable, a hierarchical regression was carried out, entering recidivism in the first model and the psychological variables neuroticism, psychoticism and the lie scale in the second step. Results showed that recidivism alone accounted for 13% of the variance, but when the psychological variables were added in the second model the variance explained increased to 50%. Table 2 shows the coefficients for both models.

---

INSERT TABLE 2 ABOUT HERE

---

The coefficients and part correlations demonstrate that as the prisoners' levels of psychoticism and neuroticism increases so too do their anger levels. However, the inverse relationship between anger levels and the lie scale indicates that as the prisoners' anger levels increase, the tendency to answer questions in a sociably desirable way decreases.

In terms of anger management programme content it is useful to know more specifically how prisoners' anger levels differ. To examine this, a MANOVA was used to compare recidivists with first sentence prisoners on the domains of the NAS (see Table 3)

---

INSERT TABLE 3 ABOUT HERE

---

As Table 3 shows, recidivist prisoners report higher levels of anger on all domains of the NAS than do first sentence prisoners.



## Discussion

Of the 4 hypotheses in this study 1 was upheld, 1 was upheld in part and 3 were not upheld.

Hypothesis 1: Violent offenders would score higher on measures of anger than would non-violent offenders.

This hypothesis was not upheld, violent offenders did not have higher scores on the N.A.S. than non-violent offenders. This result demonstrates that although anger may be an antecedent of aggressive behaviour (e.g. Cooke et al 1990) it does not necessarily follow that those who experience the highest levels of anger will direct their feelings into aggressive or violent behaviour. This result has implications for the selection of prisoners onto Anger Management programmes. If the aim of the programme is to teach offenders how to control their anger with a view to reducing aggressive behaviour (Dowden et al 1999) then selection of prisoners on the basis of a history of violence is sensible. However, the programmes also aim to reduce further offending by heightening awareness of the negative outcomes of anger (Feindler & Ecton 1986). As Averill (1980) notes, people differ in their response to feelings of anger, which raises the possibility that some offenders direct their anger into offences that do not necessarily involve aggression. Subsequently, the relationship between anger and offending behaviour may be subtler than it appears.

Hypothesis 2: Younger offenders would report higher levels of anger arousal than older offenders. This hypothesis was not upheld: younger offenders did not report higher

levels of anger than older offenders. This contrasts with research indicating younger offenders experience more feelings of anger than do older prisoners (e.g. Dangel et al 1989). However, the age range of prisoners in the current study is not comparable with prison populations in, for example, the U.K. In this study the youngest prisoners were 18 years old, whereas in other countries where there is a greater number of younger prisoners, it might well be the case that younger prisoners would demonstrate higher levels of anger. However, for the purposes of selecting prisoners onto anger management programmes the current study indicates that age is not an indicator of anger management need.

Hypothesis 3: Violent offenders would score higher on measures of neuroticism (N) and psychoticism (P) than non-violent offenders. This hypothesis was upheld in part. Violent offenders did score higher on P than non-violent offenders, a finding that supports previous research indicating a positive relationship between offending behaviour and psychoticism (e.g. Eysenck 1977). It also supports the association between aggression and psychoticism identified by Eysenck (1977) and Eysenck and Gudjonsson (1989). However, violent offenders did not have higher levels of neuroticism than non-violent offenders, which is surprising as N has links to anger (e.g. Lemerise & Dodge 1993).

Hypothesis 4: Violent offenders would attribute blame to external sources and mental elements more than non-violent offenders. This hypothesis was upheld in part. Violent offenders did attribute blame to mental elements more often than non-violent offenders, a finding that supports Gudjonsson & Petursson's (1991) study. However, violent offenders did not attribute blame to external factors more frequently than non-

violent offenders, a finding that contrasts with previous research (e.g. Gudjonsson & Petursson 1991). Interestingly, unlike the violent offenders in Gudjonsson and Petursson's (1991) study, the violent offenders in the current study reported higher levels of guilt than did non-violent offenders. Theories of emotion discuss the role of self-blame in feelings of guilt (Power and Dalglish, 1997; Roseman 1991) and research indicates that feelings of guilt are largely dependent on the attribution of intent and blame (e.g. McGraw 1987) suggesting that if a person believes they are to blame for a negative event then they are more likely to experience feelings of guilt. Consequently, it is possible that if offenders express high levels of guilt, they will be less likely to externalise blame for their offending behaviour. In addition, as research indicates anger is more likely to arise when a person feels they have been unjustly provoked or violated (Martin & Wan, 1999) it is possible that if offenders feel guilt for an offence, they may also experience lower levels of anger. Similarly, magnitude of crime could play a part in the feelings of guilt expressed by violent offenders. Gudjonsson (1999) reports that the more serious the offence, the more likely it is that offenders will report feelings of guilt. In the current study more than 10 offenders had convictions for murder or manslaughter and so it is possible that these offenders reported high levels of guilt, thus influencing the results.

However, when violent offenders' higher levels of attribution to mental elements are taken into account, it is equally likely that offenders who commit the more serious crimes and subsequently express high levels of guilt, attributed their offence to personal internal factors such as a perceived loss of control, which could be due to anger levels experienced at the time of the offence. Consequently, it would be wrong to assume that offenders who experience feelings of guilt are not in need of anger management. On the

other hand, it could be the case that the offence was the result of a single angry outburst and the offender, although classifiable as violent, is not generally violent and may have no need of anger management training. This raises the issue of whether offenders should be considered for anger management in terms of the number of violent offences, the magnitude of the offence or both, since either way he/she has a history of violent behaviour. Seen in these terms and coupled with the results of this study indicating no differences in anger levels of violent and non-violent offenders, the methods used to select prisoners onto anger management programmes becomes even more complex. Consequently, in terms of anger management programmes, the necessity for identification criteria other than a violent offence becomes even more important.

#### Predictors of anger levels

The finding that neuroticism, psychoticism, social desirable responses (lie scale) and recidivism are indicators of anger levels offers some indication of the personality and demographic variables which may suggest which prisoners need anger management training. Prisoners who display characteristics such as depression, irrationality and anxiety, all of which are consistent with neuroticism (Eysenck 1977) and have been linked to anger (e.g. Lemerise & Dodge 1993), are more likely to experience increased levels of anger, but, as the results of this study show, are not more likely to be violent offenders. Similarly, prisoners who have personality characteristics consistent with psychoticism are also more likely to need anger management which, as noted earlier, is not surprising given the links between psychoticism, offending behaviour and aggression noted in previous research (e.g. Eysenck & Gudjonsson 1989).

It is not really surprising that low scores on the lie scale go hand in hand with higher anger scores. It could be that participants who score low on the lie scale are less willing to endorse socially desirable responses, which paradoxically, may contribute to circumstances facilitating angry feelings.

The finding that recidivism is a predictor of anger levels is interesting. It could be the case that left un-addressed, recidivists' anger levels lead to reoffending, but again, as indicated by the results of this study, not in a specifically violent way. Similarly, it is possible that returning to prison leads to the feelings of unjust provocation or violation, referred to by Martin and Wan (1999) as facilitating anger. However, recidivists had higher levels of every measure of anger on the N.A.S. signifying a number of substantial differences between the two groups. There are a number of possible explanations for this result. It could be that repeat offenders have become conditioned to respond with anger. Recidivists might evaluate the short-term benefits of anger as empowering and pay less attention to the negative long-term effects anger may have, certainly their results regarding impulsivity indicate this. Equally, if recidivists act more on impulse, their offending behaviour is likely to be less thought out and possibly easier to spot by the authorities, which could result in them being arrested more frequently and hence becoming recidivists.

Alternatively, recidivists' heightened levels of anger could be due to familiarity with the social constraints associated with serving a prison sentence. For example, it has been shown that repeat offenders have less contact with friends and family whilst in prison than first-time offenders (Holt & Miller, 1972), a situation which could facilitate

emotions such as anger. Although this argument is purely speculative it is clearly testable.

The limitations and weaknesses of this study need to be recognised when evaluating the results. Firstly, the data was collected using a self-report methodology and self-report responses may not always be an accurate measure of people's emotions. In addition, the estimation of anger in this study was based on anger scores taken over a very short period of time and so what we cannot know is how and if, individual anger levels fluctuate over time. Furthermore, in other studies the prevalence of anger and its influence is not only assessed with measurements such as the NAS but also by staff reports on offenders' angry and aggressive behaviour (Renwick et al., 1997; Stermac, 1986). This type of information was not used in this study, as angry or aggressive behaviour is not recorded in a standardised manner in the Icelandic prison system. Prisons in Iceland, although not formally classified, differ in terms of security, work availability, recreation and living quarters. Such contextual variables are known to have an affect on offenders' adaptation to prison life as well as their psychological well being (Cohen & Taylor, 1972). Consequently, it is possible that some prison environments will heighten the experience of anger and the occurrence of angry outbursts more than others.

Future research needs to examine more closely the relationship between personality variables and anger levels, preferably with a larger sample and over a longer period of time. Similarly, the finding that recidivists seem to have higher levels of anger than first-time offenders also needs to be replicated with further study. It would be particularly useful, in terms of selection of prisoners onto anger management programmes, to investigate the role of anger in crimes of a non-violent nature. Equally

future research is needed to clarify the relationship between guilt, anger and attribution to mental elements.

Nevertheless, the evidence presented in this study suggests that recidivist offenders with high scores on neuroticism and psychoticism are suitable candidates for anger management programmes. This indicates that selecting only prisoners with a history of violence onto anger management programmes may result in many prisoners' anger needs being left un-addressed.

## References

Averill, J.R. (1980). The emotions. In E. Staub (Eds.), Personality, Basic Aspects and Current Research. London: Prentice Hall International, Inc.

Baron, S.W. & Hartnagel, T.F. (1997). Attributions, affect and crime: Street youths' reactions to unemployment. Criminology, 35, (3), 40-434.

Buss, A.H. & Perry, M. (1992). The aggression questionnaire. Journal of Personality and Individual Differences, Vol. 63, 452-459.

Chemtob, C.M., Novaco, R.W., Hamada, R.S. & Gross, D. M. (1997). Cognitive-behavioural treatment for severe anger in posttraumatic stress disorder. Journal of Consulting and Clinical Psychology, Vol. 65, No. 1, 184-189.

Cohen, S. & Taylor, L. (1972). Psychological Survival, the experience of long-term imprisonment. Harmondsworth: Penguin.

Cooke, D.J., Baldwin, P.J. & Howison, J. (1990). Psychology in Prisons (pp 42-55). London: Routledge.

Dangel, R.F., Deschner, J.P. & Rasp, R.R. (1989). Anger control training for adolescents in residential treatment. Behaviour Modification, Vol. 13, No. 4, 447-458.



Dowden, C., Blanchette K. & Serin, R. (1999). Anger management programming for federal male inmates: An effective intervention. Research Reports R-82. Correctional Services of Canada.

Eysenck, H.J. (1977). Crime and Personality (3<sup>rd</sup> Ed.). Routledge and Kegan Paul: London.

Eysenck, H.J. (1987). Personality theory and the problems of criminality. In B.J. McGurk, D.M. Thornton & M. Williams. Applying Psychology to Imprisonment: Theory and Practice. London: Her Majesty's Stationary Office.

Eysenck, H.J. (1996). Personality and crime: Where do we stand. Psychology, Crime and Law, Vol. 2, 143-152.

Eysenck, H.J. & Eysenck, S.B.G. (1975). Manual of the Eysenck Personality Questionnaire (Junior & Adult). Sevenoaks: Hodder and Stoughton.

Eysenck, H.J. & Gudjonsson, G.H. (1989). The Causes and Cures of Criminality. New York: Plenum Press.

Eysenck, M. (1994). Individual Differences, Normal and Abnormal. Hove: Lawrence Earlbaum Associates Ltd.

Fazio, R.D., Kroner, D.G. & Forth, A.E. (1997). The attribution of blame scale with an incarcerated sample: factor structure, reliability and validity. Criminal Behaviour and Mental Health, 7, 153-164.

Feindler, E.L. & Ecton, R.B. (1986). Adolescent Anger Control: Cognitive-Behavioural Techniques. New York: Pergamon Press.

Gudjonsson, G.H. (1984). Attribution of blame for criminal acts and its relationship with personality. Personality and Individual Differences, Vol. 5, No. 1, 53-58.

Gudjonsson, G.H. (1999). Feelings of guilt and reparation for criminal acts. In M. Cox (Ed.), Remorse and Reparation. London: Jessica Kingsley Publishers.

Gudjonsson, G.H. & Bownes, I. (1992). The relationship between attribution of blame and type of crime committed: Data for Northern Ireland. Journal of Forensic Psychiatry, 2, 337-341.

Gudjonsson, G.H. & Petursson, H. (1991). The attribution of blame and type of crime committed: transcultural validation. Journal of the Forensic Science Society, 31, 349-352.

Gudjonsson, G.H. & Sigurdsson, J.F. (2000). Differences and similarities between violent offenders and sex offenders. Child Abuse & Neglect, Vol. 24, No. 3, 363-372.

Gudjonsson, G.H. & Singh, K.K. (1989). The revised Gudjonsson Blame Attribution Inventory. Personality and Individual Differences, Vol. 10, No. 1, 67-70.

Hall, C.S., Lindzey, G. & Campbell, J.B. (1998). Theories of Personality (4<sup>th</sup> ed.)  
London: John Wiley & Sons.

Haraldsson, E. & Bjornsson, J.K. (1985). Íslensk stöðlun persónuleikapróf Eysencks (Icelandic validation of Eysenck's personality questionnaire). Reykjavik: Felagsvisindadeild Haskolans.

Heider, F. (1958). The Psychology of Interpersonal Relations. New York: Wiley.

Her Majesty's Prison Service. (1995). Anger Management Course Training Manual. London: HM Prison Service.

Hollenhurst, P.S. (1998). What do we know about anger management programmes in corrections? Federal Probation, 62, 52-65.

Holt, N., and Miller, D. (1972), Explorations in Inmate-Family Relationships,  
Research Division, California Department of Corrections, Sacramento, California.

Howells, K. (1993). The clinical approach. In K. Howells & C.R. Hollin (Eds.), Clinical Approaches to the Mentally Disordered Offender. Chichester: Wiley.

Howells, K., Watt, B., Hall, G. & Baldwin, S. (1997). Developing programmes for violent offenders. Legal and Criminological Psychology, 2, 117-128.

Kruger, R.F., Schmutte, P.S., Caspi, A., Moffitt, T.E., Campbell, K. & Silva, P.A. (1994). Personality traits are linked to crime amongst men and women: Evidence from a birth cohort. Journal of Abnormal Psychology, Vol. 103, No. 2, 328-338.

Lemerise, E.A. & Dodge, K.A. (1993). The development of anger and hostile interactions. In M. Lewis & J.M. Haviland (Eds.), The Handbook of Emotions. The Guilford Press: New York.

Loza, W. & Clements, P. (1991). Incarcerated alcoholics` and rapists` attributions of blame for criminal acts. Canadian Journal of Behavioural Science, 23 (1), 76-83.

Loza, W. & Loza- Fanous, A. (1999). The fallacy of reducing rape and violent recidivism by treating anger. International Journal of Offender Therapy and Comparative Criminology, 43 (4), 492-502.

Martin, R. & Wan, C.K. (1999). Style of anger expression: Relation to expressivity. Personality and Social Psychology Bulletin, Vol. 25, No. 10, 1196-1216.

McDougall, C., Venables, P. & Roger, D. (1991). Aggression, anger control and emotion control. Personality and Individual Differences, Vol. 12, No. 6, 625-629.

McFatter, R.M. (1998). Emotional intensity: Some components and their relationship to extraversion and neuroticism. Personality and Individual Differences, Vol. 24 (6), 747-758.

McGraw, M., (1987). Guilt Following Transgression: An Attribution of Responsibility Approach. Journal of Personality and Social Psychology, 53, (2): 247-256

Novaco R.W. (1978). Anger and coping with stress: Cognitive behavioural interventions. In J.P. Foreyt & D.P. Rathjen (Eds.), Cognitive Behavioural Therapy: Research and Application (pp 135-173). New York: Plenum Press.

Novaco, R.W. (1994). Anger as a risk factor for violence among the mentally disordered. In J. Monahan and H.J. Steadman (Eds.), Violence and Mental Disorder: Developments in Risk Assessment. Chicago: The University of Chicago Press.

Novaco, R.W. (1997). Remediating anger and aggression with violent offenders. Legal and Criminological Psychology, 2, 77-88.

Novaco, R.W. (1998). Aggression. *Encyclopaedia of Mental Health*. New York: The University of Chicago Press.

Novaco, R.W. & Chemtob, C.M. (1998). Anger and trauma. In V.M. Follette, J.I. Ruzek and F.R. Abueg (Eds.). Cognitive Behavioural Therapies for Trauma (pp 162-190). New York: The University of Chicago Press.

Peersen, M., Gudjonsson, G.H. & Sigurdsson, J. F. (2000). The relationship between general and specific attribution of blame for a “serious” act and the role of personality. Nordic Journal of Psychiatry, 54, 25-30.

Pervin, L.A. (1993). Personality, Theory and Research (6<sup>th</sup> Ed). Chichester: The University of Chicago Press.

Power, M., and Dalglish, T. (1997). *Cognition and emotion*. Hove, East Sussex: Psychology Press.

Quigley, B. M. & Tedeschi, J. T. (1996). Mediating effects of blame attribution on feelings of anger. Personality and Social Psychology Bulletin, Vol. 22, No. 12, 1280-1288.

Renwick, S.J., Black, L., Ramm, M. & Novaco, R.W. (1997). Anger treatment with forensic hospital patients. Legal and Criminological Psychology, 2, 103-116.

Roseman, I.J. (1991). Appraisal determinants of discrete emotions. Cognition and Emotion, 5, 161-200

Rule, B.G. & Ferguson, T.J. (1984). The relations among attribution, moral evaluation, anger and aggression in children and adults. In A. Mummendey (Ed.), Social Psychology of Aggression: From Individual Behaviours towards Social Interaction (143-155). Berlin: Springer-Verlag.

Shine, J. H. (1997). The relationship between blame attribution, age and personality characteristics in inmates admitted to Grendon Therapeutic Prison. Personality and Individual Differences, Vol. 23, No. 6, 943-947.

Stein, N.L., Trabasso, T. & Liwag, M. (1993). The representation of organisation of emotional experience: Unfolding the emotional episode. In M. Lewis & J.M. Haviland (Eds.), Handbook of Emotions (537-547). New York: The Guildford Press.

Stermac, L.E. (1986). Anger control treatment for forensic patients. Journal of Interpersonal Violence, Vol. 1, No. 4, 446-457.

Towl, G.J. & Crighton, D.A. (1996). The Handbook of Psychology for Forensic Practitioners. London: Routledge.

Watt, B.D. & Howells, K. (1999). Skills training for aggression control: Evaluation of an anger management programme for violent offenders. Legal and Criminological Psychology, 4, 285-300.

Weiner, B. (1995). Judgements of Responsibility. New York: Guilford.