Criminals' Emotional Experiences During Crimes

David V. Canter[1+] and Maria Ioannou[2]

[1,2]Centre for Investigative Psychology, Department of Psychology, University of Liverpool, United Kingdom

Abstract

Eighty-three incarcerated offenders indicated, on a forced choice questionnaire, the emotions they had experienced whilst committing a specific crime they remembered well. Smallest Space Analysis of these emotions showed they reflected the circumplex structure of emotions postulated by Russell (1997) for non-criminal experiences. However, they showed a stronger distinction between pleasure and displeasure than for the normal range of non-criminal experiences, with Russell's 'arousal' dimension being less clearly differentiated. Further analysis showed that different subsets of crimes were more like to be associated with different emotions. In broad terms, property crimes were found to be more pleasurable than crimes against the person. The results are taken as support for Katz's (1988) proposal that the emotional significance of crimes needs to be considered more fully in order to understand the psychological processes that sustain and encourage crimes. The utility of Russell's model indicates that the emotions experienced by criminals whilst committing crimes can be conceptualised in ways similar to other emotional experiences.

THE EXPERIENCE OF CRIME

Most social science explanations of crime emphasise societal context, antecedent events, or personality characteristics of offenders. By contrast the legal processes focus on the purposes of the offender and his/her intentions, seeking to determine the agency of the offender in the criminal act rather than causes external to the individual. One bridge between the external influence and the internal agency, that has tended to be neglected, is the actual experience of the offence by the offender. This experience is what encourages the offender to carry out the crime, providing the phenomenological, internal, reasons for the crime and the emotional benefits that help to sustain criminal activity. A better understanding of these influences will assist the modelling of the processes through which the external causes are internalised by criminals. The emotions associated with crimes can be seen as central to this process whereby context and personal characteristics are translated into actions. A study of the feelings associated with crimes will also broaden the legal perspective by providing a richer understanding of the notion of 'intention' so crucial to jurisprudence.

+Address for correspondence: Professor David Canter, Centre for Investigative Psychology, Department of Psychology, University of Liverpool, Eleanor Rathbone Building, Bedford Street South, Liverpool, L69 7ZA UK. Ph 44-151-794-3910; Facsimile: 44-151-794-3938; Email: canter@liverpool.ac.uk

Although there have been few recent studies of the emotions experienced by criminals, the emotional significance for perpetrators of their criminal actions have long been recognised. Over a century ago the French psychologist Dubuisson explained why some women shoplift:

> Temptation is so strong, surging desire so powerful, so impervious, so irresistible that the act [shoplifting] is accomplished before reason has time to plead its cause…for the moment pleasure is everything (quoted in Albelson, 1989, p.46)

Yet with the exception of Katz (1988) in his book on the *Seductions of Crime*, there are very few studies of what the offender feels when in the process of committing a crime and how those emotional reactions may induce or sustain criminal activity. As Katz also points out such studies may also help in understanding the qualities of experience that distinguish different forms of criminality.

On the basis of narrative descriptions from university students, and some first hand accounts available from convicted offenders, Katz proposes that there are a variety of emotional states that entice the offender to offend. In violent crime, for example, he identifies feelings such as humiliation, righteousness, arrogance, ridicule, cynicism, defilement and vengeance that, in effect, give the offender the feeling that s/he had a moral right to attack. What Katz calls 'righteous slaughter'.

For property crimes, the experience of which is mainly culled from petty crimes reported by students, Katz sees the dominant emotion of a "sneaky thrill". Offenders are seduced by objects, people and, most compellingly, by the act of crime itself. Katz notes that much theft is not driven by need. This argument has been supported more recently by McCarthy (1995) who has shown that most young thieves do not steal to get essentials like food, but luxuries, drugs, ostentatious clothing and other items that reflects fashion rather than necessity. Fleming (1999) also revealed that most youthful auto theft in British Columbia was carried out for recreational purposes not for profit. Indermaur's (1993) study of property offenders gave a slightly different picture, finding that offenders mostly described their emotions in terms of justifiable anger, or of being in an "impossible position", rather more akin to Katz's violent offenders. He reports on a range of criminal

emotions: tension, fear, excitement, anger, and frustration.

The Circumplex of Emotions

Katz' (1988) important book, and the support given to it by studies of specific subsets of crimes, raises the more general question of whether an overall structure can be found for the emotions experienced by the full range of criminals and whether these have any systematic relationship to different forms of crime. If there were such a structure then one hypothesis would be that it reflects the structure of emotions that has been proposed for emotions in general. This hypothesis is based on the premise that criminality reflects the full range of human activities and experiences. The contrasting hypothesis is that criminal actions draw on a very limited range of emotional experiences because they are a product of a very distinct subset of ways of relating to others. The present study set out to determine which of these contrasting hypotheses gains most support.

Several major lines of research on affective structure indicate the presence of two major bipolar dimensions. These include analyses of facial and vocal emotional expressions (e.g. Albelson & Sermat, 1962; Schlosberg, 1954), and judged similarities among mood words (Russell, 1979). In these studies Pleasantness - Unpleasantness (terms such as happy, enthusiastic and content, versus afraid, sad) and Degree of Arousal or Activation (excited, tense versus relaxed) have regularly emerged as the two major dimensions of mood (Watson & Tellegen, 1985). Russell (1979, 1997) has developed this framework further by hypothesizing a circular order of emotions, or 'circumplex' that incorporates these two bipolar axes, whilst recognising that emotional states merge into one another, a proposal that has been supported in a number of studies (Fisher, Heise, Borhnstedt & Lucke, 1985; Plutchik, 1962; Russell, 1979; Schlosberg, 1954; Watson & Tellegen, 1985).

Figure 1 is a schematic representation of a circumplex that illustrates how emotions, feelings, moods and related states fall in a continuous order around the perimeter of a two-dimensional space. The centre of the space establishes a neutral point or adaptation level. This circular model is one example of a general class of models for aspects of human experience and personal attributes first proposed by Guttman (1954) as the basis of his Facet Theory (Canter, 1984). Such circular models have now been demonstrated for intelligence, social

interactions and aspects of personality, as well as criminal behaviour (e.g. Canter and Heritage, 1989). They are all characterised by the relationship amongst the variables having a circular order in the sense that it is without beginning or end, similar variables being closer to one another on the circle. Variables that are semantic or behavioural opposites are located directly across the circle (i.e., through the origin) and variables that are unrelated or orthogonal are separated by angles of ninety degrees. The model gives rise to the identification of four quadrants that capture four broad classes of mood; distress, elation, calmness, and depression.

One important aspect of this structure rarely noted, however, is that it implies a degree of variation in intensity from the centre outwards. In studies of emotion the neutrality at the centre of the space is mentioned, but the implication that as the variable gets further from the centre so it is more intense has not usually been considered. In the context of criminal actions this consideration is important because it is possible that whilst criminality runs the full gamut of emotions it may be hypothesised that they would be more extreme in intensity, that intensity being what encourages the criminal to take action.
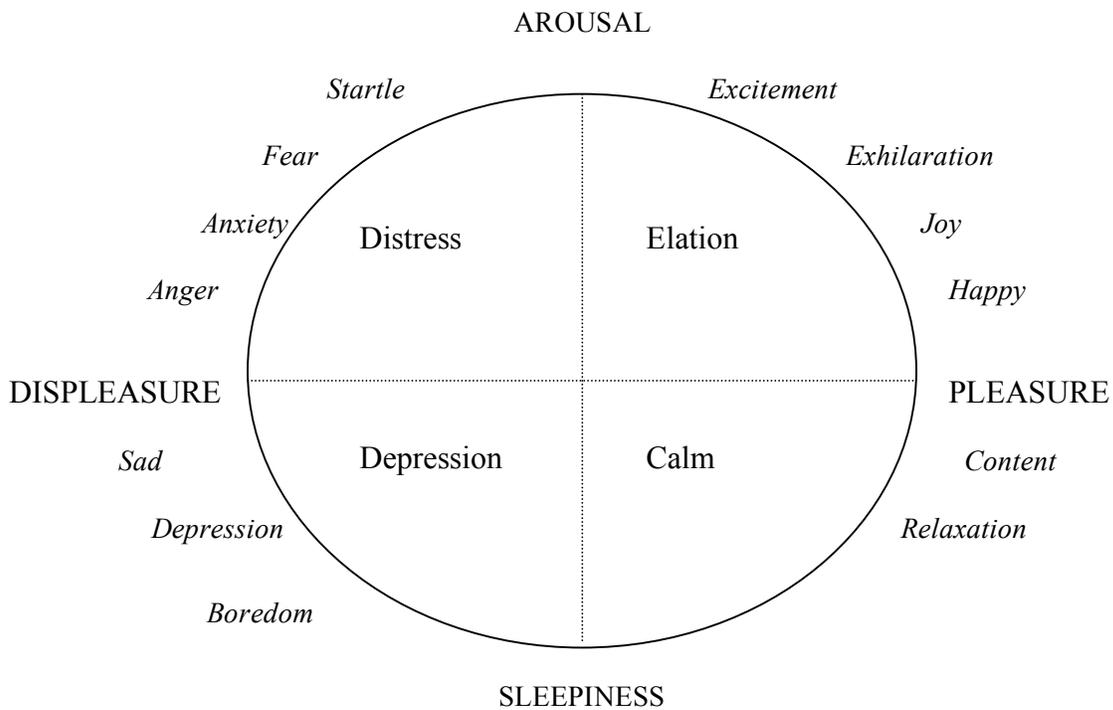
AROUSAL

Startle   *Excitement*

Fear   *Exhilaration*

Anxiety   Distress   Elation   *Joy*

Anger   *Happy*

DISPLEASURE   PLEASURE

Depression   Calm

Sad   *Content*

Depression   *Relaxation*

Boredom

SLEEPINESS

Figure 1. Russell's (1997) Circumplex of Emotions.

The Present Study

There are two related objectives for this study:

1. In accord with the contrasting hypotheses, this study set out to determine if the structure of emotions experienced by criminals when committing their crimes reflected the

circumplex of emotions or some distinct sub-set of emotions.

2. A further hypothesis was that the emotions experienced by criminals would be more intense and extreme than normally reflected in studies of the circumplex of emotions.

3. Drawing from Katz (1988) it was also hypothesised that there would be differences in the emotions experienced during different types of criminal act. In broad terms property related crimes were hypothesised to relate to the emotions in Russell's *elation* quadrant and violent crimes to those in the *distress* quadrant. This latter hypothesis, however, is dependent on finding support for the circumplex model in criminals' emotions.

METHOD

Participants

A total of 83 convicted criminals participated in this study. The offenders were incarcerated in a local prison in Liverpool, UK. All the participants in the study were male with an age range of 21-77 (mean 34.04, SD 10.99) and had been convicted for a range of crimes covering robbery, murder, rape, theft etc. Table 1 summarises the offences and their frequency within the sample.

Table 1.
Number of Offenders Interviewed for Each Offence Type

Type of offence	No of offenders	Type of offence	No of offenders
Burglary	16	Indecent exposure	2
Robbery	12	Affray	1
Supply drugs	10	Arson	1
Indecent assault	7	Assist move body	1
Murder	7	Attempted rape	1
Rape	5	GBH	1
Assault	4	Kidnapping/violence	1
Fraud	4	Manslaughter	1
ABH	3	Possession of fire Arm/violence	1
Violence	2	UTMV	1
Theft	2		

GBH = Grievous Bodily Harm
UTMV = Unlawful Taking of a Motor Vehicle

Procedure

A questionnaire consisting of twenty emotions statements, representing emotions selected to cover the full gamut of Russell's (1997) circumplex, was developed from pilot research that had shown the emotions made sense to criminals as possible descriptions of their feelings during a crime they could clearly remember. A five-point Likert scale was used to measure the extent to which offenders felt the emotions applied to their experience of crime, ranging from strong disagreement (1) to strong agreement (5) with 3 being the mid-point "Neither agree nor disagree". The full questionnaire is given in the Appendix. The questionnaire was presented as part of an extended interview in which various background characteristics and offence history were recorded. The interviews were conducted in the prison in a cell specially made available for the interview, so that a moderately quiet and completely confidential environment could be created for the interviewer. Respondents volunteered for a study, which they were told was about their experiences of crime. In the briefing it was made clear to the respondents that their participation was completely voluntary and that they could leave at any time if they wished. It was also emphasised that their responses were completely confidential to the research team and would not be made available to the prison authorities or the legal system in any way that would allow identification of individuals. It was thus explained to them that their answers could not play any role in any appeal or request for parole that they might be making or any privileges within the prison. However, it was pointed out to them that if they mentioned in the interview a serious crime of which the police were not aware or an intention of committing a serious crime then the researcher would be legally bound to report that to the authorities. They were then asked to sign a consent form. Respondents were instructed to think of a crime they had committed, that they could remember very clearly, and to consider what they felt whilst they were in the process of carrying out that crime. They were then asked to read through the list of statements describing how people may feel when committing crimes and to indicate the extent to which they disagreed or agreed that the statement reflected their own particular feelings during the crime they were thinking of. Care was taken to ensure that the respondents could read and understand each question, giving them help to read the question if necessary. Once they had completed the questionnaire they were asked to describe briefly the crime of which they had been thinking. This is the list of crimes in Table 1.

Smallest Space Analysis

The central hypothesis is that the full range of crimes will cover the full range of emotions as modelled by Russell (1997). This is a structural hypothesis about the pattern of relationships between emotions as shown in Figure 1. The most direct way of testing this is to represent the relationships between declared emotions as distances in a spatial configuration, a procedure central to multi-dimensional scaling (MDS). In the present case the MDS process of Smallest Space Analysis SSA – I (Lingoes, 1973) was used. In essence the null hypothesis is that the variables will have no clear relationship to each other nor their intercorrelations be open to an interpretation that reflects Russell's circumplex.

The SSA program computes association coefficients between all variables. It is these coefficients that are used to form a spatial representation of items with points representing variables. The more highly intercorrelated the variables are the closer will be the points representing those variables in the SSA space. The pattern of points (regions) can then be examined and thematic structures delineated. Emotions, in this case, with similar underlying themes are hypothesised to be more likely to be highly correlated and so would be closer together in the configuration than those that imply different themes. If, for example, criminals experienced anger when they experienced confidence – a relationship not hypothesised from the circumplex – then the points representing these two variables would be close together in the SSA configuration, reducing support for the circumplex hypothesis. Furthermore, the relationships between the main components of emotion as proposed by Russell (1979) imply an overall regional structure, presented in Figure 1, that would be recoverable from the SSA configuration if that structure occurred across criminals' experiences of crimes.

The coefficient of alienation (Borg & Lingoes, 1987) indicates how closely the rank orders of the distances between the points in the spatial representation relate to the rank orders of the correlations between the variables. The smaller the coefficient of alienation the better the fit between the derived SSA configuration and the correlation matrix from which it is derived. However, as Borg

& Lingoes (1987) emphasise, there is no simple answer to the question of how "good" or "bad" a representation is. This will depend upon a combination of the number of variables, the amount of error in the data and the logical strength of the interpretation framework. In the present case Russell (1979) provides a strong and clear hypothesis of what the SSA configuration should reflect, so even a relatively high coefficient of alienation could be tolerated.

RESULTS

The two-dimensional solution of the SSA for the emotion variables, in Figure 2, has a Guttman-Lingoes coefficient of alienation of 0.15 with 14 iterations. This would be a good fit for any data but for the present sample with a strong hypothesis it is exceptionally good, providing confidence that the two dimensional SSA solution does represent the intercorrelations very well.
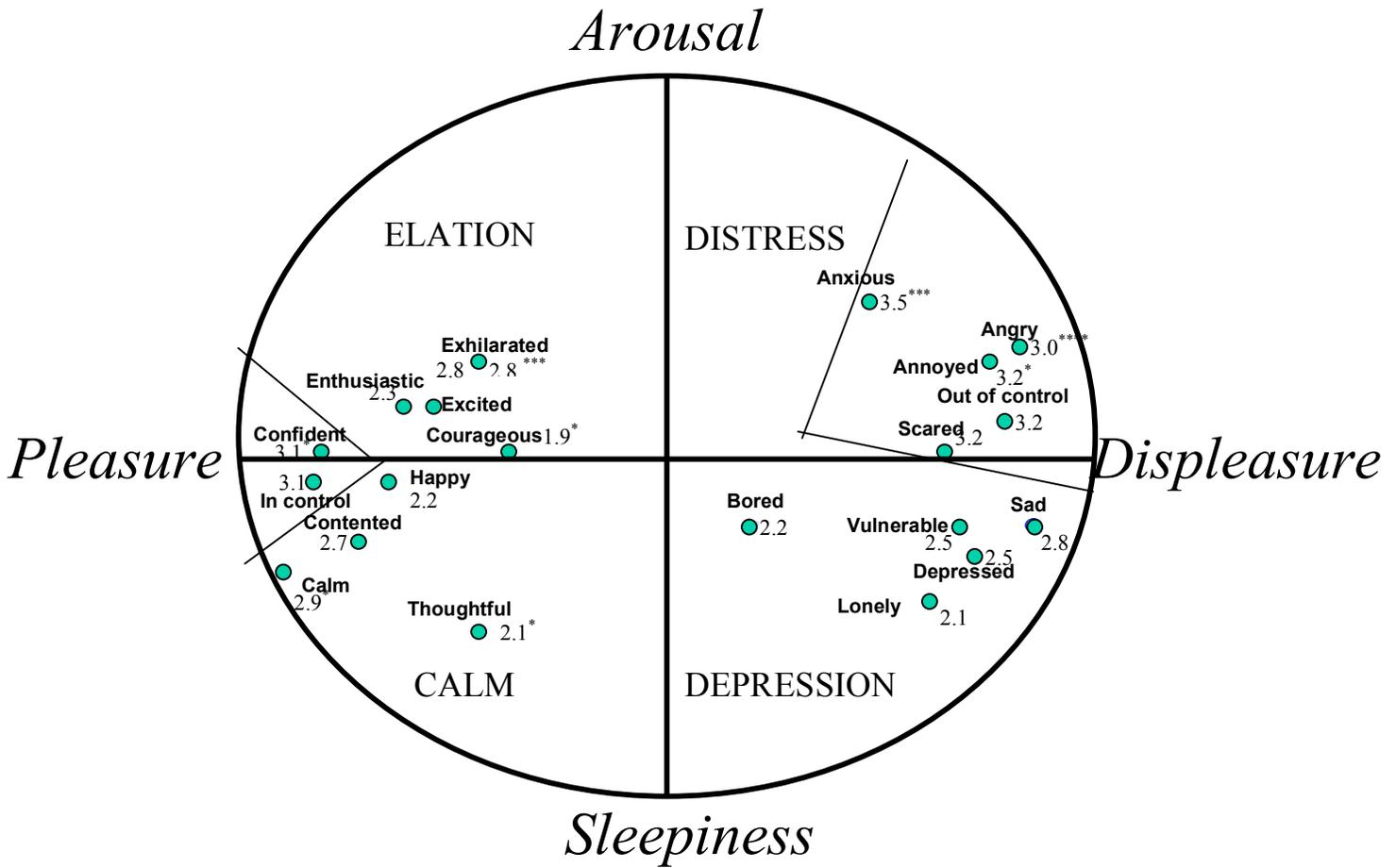

Figure 2. Two-Dimensional Smallest Space Analysis (SSA) of Emotions with Regional Interpretation and Mean values Indicated (The regions of extreme values are indicated).

Coefficient of Alienation = 0.15598
Levels of significance based on ANOVA as in Table 3
*   for p < .05
**   for p < .01
*** for p< .005
**** for p < .001

The first stage in the interpretation of the SSA is to test the hypothesised structure of the emotional experience by examining the SSA configuration. It was hypothesised that a full range of crimes would capture the full range of emotions and therefore the structure of the SSA would reflect Russell's circumplex for emotions (1997). Visual examination of Figure 2 reveals that those emotions that are pleasurable, such as exhilarate, happy and contented are all clearly to the left of the plot and the negative emotions, such as anxious and depressed are to the right. This division accords directly with the dominant axis in Russell's model of pleasure-displeasure.

It is interesting to note that some of the emotions introduced as of particular relevance to criminal experiences find their place within this division. Emotions such as being out of control or annoyed are clearly negative, whereas calm and excited are positive. Russell's dominant axis is therefore clearly relevant to the experience of crimes.

The strong division along this dominant axis does lend support to the distinctness of emotions in this context. Criminals are indicating that their experiences are either pleasurable or not with little in the way of gradations between these extremes.

The full circular structure of emotions is therefore not recovered in this context but what might be regarded as a version that reflects more extreme differences.

The arousal axis is less differentiated than the pleasure axis, possibly corresponding to the fact that all crime has some degree of arousal associated with it. However a region is present at the top of the configuration in which more aroused states can be seen, e.g. exhilarated, excited, anxious and annoyed. At the bottom are the less energised emotions such as calm, thoughtful, lonely and depressed. There would therefore seem to be some variation between crimes in the level of arousal they engender.

These two axes allow the plot to be partitioned into four distinct themes, which do reflect the circumplex of emotions posited by Russell (1997): elation, calm, distress and depression. The variables that make up each of these regions are given in Table 2 together with the means and standard deviations for each emotion across the whole sample. The means have been inserted on the SSA configuration in Figure 2.

Table 2.
The Emotions Making up the Four Regions of the SSA with (means) and [standard deviations] in Parentheses.

	Pleasure		Displeasure	
Arousal	ELATION:		DISTRESS:	
	Exhilarated	(2.76)[1.8]	Anxious	(3.50)[1.7]
	Enthusiastic	(2.29)[1.6]	Angry	(2.96)[1.9]
	Excited	(2.75)[1.8]	Annoyed	(3.17)[1.9]
	Courageous	(1.94)[1.5]	Out of control	(3.20)[1.8]
	Confident	(3.13)[1.8]	Scared	(3.18)[1.8]
Sleepiness	CALM:		DEPRESSION:	
	Happy	(2.23)[1.6]	Sad	(2.82)[1.8]
	In control	(3.08)[1.8]	Vulnerable	(2.54)[1.8]
	Contented	(2.70)[1.8]	Bored	(2.22)[1.6]
	Calm	(2.87) [1.8]	Depressed	(2.48)[1.8]
	Thoughtful	(2.11)[1.6]	Lonely	(2.11)[1.6]

The mean scores indicate that overall the degree of emotion experienced across this sample does cover a range of intensity. The highest averages are for being anxious (3.50), out of control (3.20) and scared (3.18) contributing to the 'distress' region having the most distinctly high set of averages.

When the means are put on the SSA plot, as in Figure 2, it can be seen that the highest values are at the extremes of the axis of pleasure/displeasure. The lowest means, indicating no agreement across all respondents that these emotions describe the crimes, are for those emotions towards the centre of the plot, lonely (2.11) thoughtful (2.11) and courageous (1.94). This indicates that the emotions that are most distinct across the sample are the ones that the respondents regarded as most relevant to their experiences. This further supports the view that criminals do judge their crimes as being associated strongly with either pleasurable or unpleasant feelings. This lends some support to Katz's (1988) thesis that emotions are an important aspect of understanding crime. However, the means considered so far are across the whole sample of very varied crimes, consideration is therefore given next to differences between crimes.

Emotions and Type of Crime

Without a detailed interview of offenders, or indeed being present during the offence it is difficult to determine exactly what occurred and therefore how that may have been relevant to the emotion. However, it is hypothesised that there are broad differences in the actions that occur between major offence categories and that, therefore, these crime categories will relate to the different emotions.

The crimes the offenders had described were therefore assigned to one of seven broad categories: Property Offences (Burglary, Theft, Arson, Unlawful taking of a motor vehicle), Fraud, Drug offences, Robbery, Violence (Assault, ABH, GBH), Sexual Offences (Indecent exposure, Indecent assault, Attempted Rape, Rape), Murder (Murder, Manslaughter, Assisting moving a body). ANOVAs were then calculated across these seven categories for each of the 20 emotion variables. The significant ANOVA results and related means are summarised in Table 3 as well as being indicated on Figure 2. There it can be seen that there is a tendency for the emotions on the periphery of the configuration, i.e. those most strongly discriminated, to reveal significant differences across these seven categories.

Table 3.
The Emotions That are Significantly Different Across the Seven Categories of Crime Type.

CRIME TYPES	EMOTIONS							
	Confident	Calm	Exhilarated	Thoughtful	Courageous	Anxious	Annoyed	Angry
Fraud	5.0	4.8	2.5	4.8	2.5	4.8	2.0	2.0
Robbery	3.6	2.7	3.8	1.4	2.3	4.3	3.8	3.9
Property	3.6	3.3	3.6	1.9	2.8	3.5	2.4	2.2
Drug	3.2	3.3	2.9	2.2	1.6	3.5	2.0	2.0
Sex	2.7	2.8	2.0	2.1	1.2	2.1	2.5	2.2
Violence	2.9	2.7	1.9	2.2	1.6	3.4	4.1	4.4
Murder	1.8	1.2	2.0	2.2	1.4	4.6	4.3	4.1
TOTAL Mean (S.D.)	3.1 (1.8)	2.9(1.8)	2.8 (1.8)	2.1(1.6)	1.9 (1.5)	3.5(1.7)	3.2(1.9)	3.0(1.9)
F (p <)	2.3 (.05)	2.5 (.05)	3.1 (.005)	2.7(.05)	2.5(.05)	3.6(.005)	2.8(.05)	4.7(.0001)

The most distinct emotions are exhilaration in the pleasure region and anger in the displeasure region (both giving ANOVA at p < .01). As predicted the former has its highest means for robbery and property crimes and the latter for violence and murder. However the range of means in Table 3, as well as the relatively high standard deviations for a five-point scale, does show that there is a great mix of emotions associated with different criminal experiences. However, there are significant differences between sub-groups of offenders indicating the value of exploring these distinctions further.

Distinguishing the Overall Emotional Direction of Offence Types

The previous analysis focuses on the average differences between emotional reactions across crimes and their subsets. There is also value in putting the emphasis on the actual crimes sets to determine what emotions are characteristic of each

broad group of offences. Given the dominant distinction between pleasant and unpleasant experiences it is appropriate, at this stage in these studies, to consider the overall emotional direction that is typical of each subset of crimes.

In order to investigate how offenders regarded their offences (either positively or negatively), each was given a total score based on the difference between the mean score for the positive emotions that he experienced, and a mean score for the negative emotions. This was calculated by totalling the scores for all of his answers to the questions that were situated in the positive region of the SSA and subtracting the total score of the negative emotions. This gave each offence a value for how positive or negative it was overall. Values were averaged over the seven crime types as summarised in Figure 3. This shows that fraud and property offences tend to

be positive emotional experiences, while offenders committing robbery, sexual offences, violence and murder tend to be negative emotional experiences, with fraud strongly at one end of the scale and murder at the other. Figure 3 therefore provides a first approximation, summarising the emotional character of each class of crime. This may prove fruitful as a basis for exploring other factors in the emergence and continuation of different types of crime.

Figure 3 shows in another form what has emerged from earlier analyses, that offences against property were emotionally pleasurable and offences against the person were unpleasant. The almost neutral experience of drug offences, which are not clearly property or person oriented is also interesting in this regard raising the possibility that the emotional tone of a crime is a product of the nature of the transaction with others.
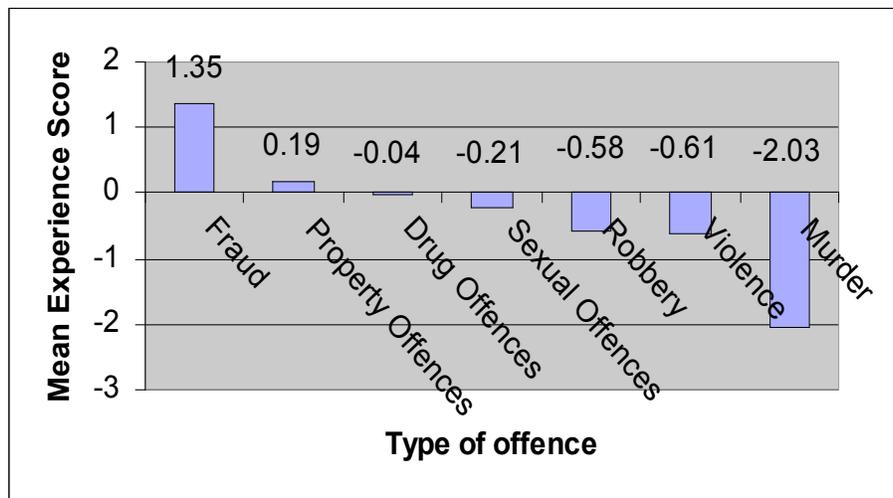

Figure 3. Overall Emotional Direction of Offences in each of Seven Categories.

DISCUSSION

Katz (1988) argued for a redirection of the study of crime from the traditional focus on background characteristics and social conditions to the foreground, the sensual dynamics of crime. The present study investigated the emotions that are experienced during a variety of offences. Eighty-three convicted criminals were interviewed and the data from these interviews were subjected to

Smallest Space Analysis (SSA), to determine whether there was an interpretable structure to the emotions. Further analysis considered the

relationships between the type of offence being committed and how the offence was experienced.

In keeping with Russell's Circumplex of Emotions (1997) for non-criminal experiences the results of the SSA supported the distinction found in many other studies with dominant axes of pleasure and

arousal. This allowed the identification of four modes of emotion: Elation, Calm, Distress and Depression. The existence of these within criminal contexts. However, the SSA results and further consideration of the means did indicate that the experience of crimes may be more strongly bi-polar than the usual range of emotions. In particular the pleasure - displeasure axis seems to dominate focusing on either happy, confident and exciting feelings or on anxiety, anger and annoyance.

The hedonic essence of the two sets of emotional reactions allowed further consideration of which types of crime were most strongly associated with which feelings. Although there were considerable variations within offending groups, overall it was found that property offences were the most pleasurable and violent offences were typically associated with distress.

As one of a few studies using self-report procedures with criminals this can only be regarded as a first step towards understanding the role that emotion plays in the development and continuation of offending. The low frequencies in some sub-sets of offence make further study essential to determine the reliability and robustness of these findings. The use of self-reports in the context of prison also needs to be treated with some caution. It is possible that respondents are greatly influenced by social acceptability biases, as well as re-evaluating their crimes in retrospect, even though instructions sought to minimise this. Only further study with other techniques and samples can assess the extent to which the 'emotions' recorded here are more appropriately considered 'justifications'.

The study of the criminal emotional experience described here provides a methodology and theoretical framework for exploring an important concomitant of criminal behaviour. This can be of value in treatment and training of offenders as well as aiding law enforcement agencies to better understand the actions of those they seek to detect, capture and control. As such it offers the foundations for a bridge between the concern with agency that is central to the legal process and the concern with cause that is at the heart of social science studies of crime.

REFERENCES

Albelson, E.S. (1989). When Ladies Go A-Thieving: Middle Class Shoplifters in the experience lends support to the perspective that criminal reactions are but an aspect of normal acceptable functioning, but applied to different Victorian Department Store. New York: Oxford University Press.

Albelson, R. P., & Sermat, V. (1962). Multidimensional scaling of facial expressions. Journal of Experimental Psychology, *63*, 546-554.

Borg, I. & Lingoes, J. (1987). Multidimensional Similarity Analysis. New York: Springer-Verlag.

Canter, D. (1984). (Ed.) Facet Theory: Approaches to Social Research. New York: Springer – Verlag.

Canter, D.V. & Heritage, R. (1989). A Multivariate Model of Sexual Offence Behaviour: Developments in Offender Profiling. Journal of Forensic Psychiatry, *1*(2), 185-212.

Fisher, G.A., Heise, D.R., Bohrnstedt, G.W & Lucke, J. F. (1985). Evidence for Extending the Circumplex Model of Personality Trait Language to Self-Reported Moods. Journal of Personality and Social Psychology, *49*(1), 233-242.

Fleming, Z. (1999). The Thrill of it All: Youthful Offenders and Auto Theft. In P.Cromwell, In their own words: Criminals on crime. 2st Ed. Los Angeles: Roxbury Publishing Company.

Guttman, L. (1954). 'A New Approach to Factor Analysis: The Radex'. In Lazarsfield, (ed). Mathematical Thinking in the Social Sciences. New York: Free Press.

Intermaur, D. (1993). Offenders' Perspectives on Property Crime. In P.Cromwell, (1996) In their own words: Criminals on crime. 1st Ed. Los Angeles: Roxbury Publishing Company.

Katz, J (1988) Seductions of Crime: Moral and Sensual Attractions in doing Evil. USA: Basic Books.

Lingoes, J. (1973). The Guttman-Lingoes Non-Metric Program Series. MA Thesis, University of Michigan.

McCarthy, B. (1995). Not just " for the Thrill of it": an Instrumentalistic Elaboration of Katz's Explanation of Sneaky Thrill Property Crimes. Criminology, *33*(4), 519-538.

Plutchik, R. (1962). The Emotions: Fact, Theories and a New Model. New York: Random House

Russell, J.A. (1979) Affective Space is Bipolar. Journal of Personality and Social Psychology, *37*(3), 345-356.

Russell, J.A. (1997). How shall an Emotion be called? In R. Plutchik & H.R. Conte (Ed.). Circumplex Models of Personality and Emotions. Washington, D.C: American Psychological Association.

Schlosberg, H. (1954). Three Dimensions of Emotion. Psychological Review, 61, 81-88.

Watson, D. & Tellegen, A. (1985). Toward a Consensual Structure of Mood. Psychological Bulletin, 98(2), 219-235.

APPENDIX

Emotions Felt During Crime Questionnaire

Instructions: Describing a crime you have committed that you remember well, please circle a number next to each statement to indicate the extent to which you agree or disagree that statement describes your feeling at the time your were doing the crime.

Disagree Strongly 1	**Disagree a little** 2	**Neither agree nor disagree** 3	**Agree a little** 4	**Agree strongly** 5			

1.	I felt courageous	1	2	3	4	5
2.	I felt contented	1	2	3	4	5
3.	I felt anxious	1	2	3	4	5
4.	I felt confident	1	2	3	4	5
5.	I felt happy	1	2	3	4	5
6.	I felt lonely	1	2	3	4	5
7.	I felt exhilarated	1	2	3	4	5
8.	I felt calm	1	2	3	4	5
9.	I felt in control	1	2	3	4	5
10.	I felt scared	1	2	3	4	5
11.	I felt depressed	1	2	3	4	5
12.	I felt enthusiastic	1	2	3	4	5
13.	I felt thoughtful	1	2	3	4	5
14.	I felt annoyed	1	2	3	4	5
15.	I felt angry	1	2	3	4	5
16.	I felt sad	1	2	3	4	5
17.	I felt excited	1	2	3	4	5
18.	I felt bored	1	2	3	4	5
19.	I felt vulnerable	1	2	3	4	5
20.	I felt out of control	1	2	3	4	5